THE SPACE GAMER

THE SPACE GAMER NO.6 June - July

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THE SPACE GAMER's goal is growth and improvement of the hobby through service to the hobbyist gamer. Activities of all publishers, groups, and individuals involved in SF&F gaming are considered input to THE SPACE GAMER's casual format.

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Editor Howard Thompson
Editorial Assistant Mary Peth Jones

TSG GOES BI-MONTHLY

That's right! It has been only two months since you got your last issue of TSG. With this issue we're now on a bi-monthly publishing schedule. After the next six issues or so, with our bi-monthly format, TSG will re-evaluate and consider another round of possible improvements. For instance, we may go to a 8½ x 11" format of approximately 20 pages, a 25% increase in actual printing space. Or we may keep our current digest size, but publish more frequently. Also in the future, Metegaming may possibly come out with a second magazine in a new area of gaming. This new-area gambit depends on what happens in the next year, so we won't say more now.

MONSTER! MONSTERS! will be available for August 5, 1976 shipping. It's at the printers now. M! M! is designed by Ken St. Andre, TUNNELS & TROLLS designer, and edited by Steve Jackson and the Metagaming staff. Have the unrelieved heroics and derring-do of DUNGEONS AND DRAGONS and EMPIRE OF THE PETAL THRONE been leaving you a bit jaded? MONSTERS! MONSTERS! will provide instant relief. No longer do the heroes cast Long Shadows of Doom over the Lowly Monsters! No longer are the monsters mere meat for the experience points of a hoard of triumphant players!

ARISE YE MONSTERS and smite thy tormentors! Now you become one with the horrid fiends of the Underworld. You prey upon the luckless humans happening upon your path. Instead of winning points for gold and monsters destroyed, you score for being nasty and horrid--in the game, of course.

St. Andre's fertile, nay grotesque, creativity has been organized to present a welcome change in swords and sorcery gaming. The rules are a complete package with sections detailing vital set-up for play, sequence of events and Game master regulations. You'll find M! M! an excellent introduction to fantasy gaming.

Our next game will probably be WARS OF THE NARYM, by Lynn Willis. NARYM is a complex game strong in social and political factors, including war and economics. NARYM may be ready shortly after TSG#7--if subscription renewels roll in fast enough.

PLEASE RENEW EARLY so you won't miss an issue, and so we can plan accurately for circulation levels. We will offer a renewal bonus, nothing big, but it will not be ready soon. Work on the all-vital games, currently, is taking creative priority.

HYMENOPTERA, patience please, we schedule tentatively for November. It will be expensive, with a plastic map and a pile of die-cut counters for six players.

For now, we hope those of you who have been with us from the early issues are beginning to see the results of your loyalty and trust. 1976 is the year we get on our feet and organize. 1977 will be the year for innovations. We're small, but stick around. You'll be suprised.

HT

LETTERS

Dear editor:

There has been a lot of talk in your articles about the reality and believability of your science-fiction game. One writer points out how laws of science are constantly broken. Another points out that in order to make the game playable some extension of scientific law is needed.

They're both right. Several games ignore completely several laws of physics, but there is a difference between ignorance and extension. The writer who complains about the lack of realism remarks about the far-out weapons used. Yet, in issue #5 he says a possible weapon against the proposed instellar ramjet is a field distorter. This sounds like one of those far-out weapons he put-down. But this isn't my main point. What I'm saying is that this writer is shortsighted. Such things as phasers and hyper-light speeds don't ignore physics. They are extensions or developments of the basic laws. Although Einstein says no matter can exceed light, there is no denying tachyons and other particles that go faster than light. In fact, several physicists have theorized about ways to exceed the speed of light.

Still, I agree that a designer should take notice of the laws of nature when designing a game. This adds to the believeability and realism of the game. I've often wondered how a spaceship traveling faster than light can fire a laser-type weapon (a beam of light) and hit another ship going faster than light. The beam is traveling slower than its target! Unless an energy beam is made that can go faster than light (I'm not saying it's impossible, but the designer should have some sort of explanation), the primary weapon will be the missile.

These missiles would be armed with fusion, anti-matter, or corbite warheads. An attacking ship would fire these missiles and then scram to avoid the blast. If the range of these missiles is great enough, the attacker may not even have to leave. There are several different means of propulsion. For anyone who has some imagination, they are easy to think of. Besides the usual idea of self-contained propulsion, another method comes to mind: the use of a deflector-tractor beam. The tractor holds the beam on course, and the deflector pushes it toward the target. Again, there is the problem of the composition of the beam. It can't be based on light because of the restrictions mentioned earlier. (I think I'm getting too involved with this subject.)

Finally, I wish to mention one other possible weapon. Say a ship has the ability to enter hyperspace, the place of short-cutting journies by going on a different space and time continuum. This ability could be used as a weapon. The field that allows the ship to enter hyperspace is thrown out in front of the attacker at the target. As the fabric of normal space is torn apart, so is the target.

Well, that's it. I just wanted to get my views in about the subject. In closing, I'd like to say that I enjoy your magazine a great deal. Keep up the good work.

Keith Bernados

****

Hurray!!! You're getting professional! I don't want to see the casual format go, but an upstep in grammer and reduction of tyypos (I'm allowed them, you're not) would sand down the rough appearance, don't finish it, you'll ruin the wood! (If that doesn't make any sense, don't read it.)

Don't get cute and try to repudiate that statement, for typos abound in your magazine (of course, it does add excitement to the reading--can you break the code? I believe they meant, "he 'spit' in the gutter") and grammar isn't quite good enough to make "F" in an English class. The constant use of "'til" (non-acceptable slang for until, it's until or till) rubs against the grain of any perfectionist.

I must state that your magazine would be lucky to come out of a journalism course with an "F-"; it would probably be handed back to be re-done. However, your "Helter Skelter" style of combining art, ads, articles, and behind the scenes accounts of the magazine affairs may be just what we need.

I have a few questions on S. C. (which I intend to buy right after a STAR TREK battle manual, and when I get the cash. You guys with a few thousand dollar budget break my heart. I operate in the two digits behind the decimal point). Is there any possibility (too slight to be mentioned) that an escort can kill a dreadnaught, or is there a functional problem with this? If there could exist a possibility not reflected in the rules, why not use something like rolling six sixes? That's a one in 46,656 (if math serves me correctly) chance. Of course, 46,656 escorts would probably kill the DN with the loss of only one of their members, but shouldn't they? If it is a functional inability (like a shotgun not hitting a B52), I see no reason why escorts should not be more powerful than an ATK (1-on-1, let alone 2-on-1). Use escorts against scouts, escorts, and attacks, but if a dreadnaught shows up before you can build ATKs, say goodbye.

In all probability, the ATKs probably are a new breed of ship (it does take more technology to make them, doesn't it?) that introduces a new weapons-system. As such, it may be temporarily less effective than conventional weaponry, but the inadequacies should be eliminated with the first generation (ATKs), and the research should produce a trouble-free second generation (DNs). The ATKs would then be seen as just a necessary step to dreadnaught-capability technology. They're still twice as good as an escort in ATK vs. ESC situations, 3 times as good in destroying planet populations and infinitely (unless you use my rule) better against dreadnaughts. Also, a player smug in his conviction that ESCs are better than ATKs may elect not to build any ATKs. If his opponent likes war to the hilt, chances are the player may suddenly see an enemy dreadnaught and then about five more following at one turn's movement distance -- wave after wave as they are built. The player can do nothing but get shot. He must devote total IU first to building ATKs to slow down the attack, and then to building DNs to stop the attack. Will he have time?

On the other hand, a player who builds ATKs will be able to slow the offensive as soon as it is spotted, and will only have one step to making DNs instead of two. The escort illusion might become one of safety -- a beginner wraps himself in a security balnket of escorts only to be rudely awakened by the cold north wind in the form of a DN fleet blowing through his blanket.

Everybody is staring at the question about the pfs rip-off, but everybody seems to be over-looking the obvious: what with no special technology, no special suicide fleets and no limitations, the ESC vs. DN problem is a missing integral factor. There should be some number of ships that can wipe out a pfs say 50 DN, 500 ATK, or 2500 ESC. The pfs then would be divided into 2500 parts. A lone ESC destroys 1 part, a lone ATK 5, and a lone DN 50. Thus you get partial destruction of the pfs which can be repaired by spending IU. 250 damaged parts could be repaired for 1/10th the cost of the pfs. So a player with a pfs built at the expense of his fleet may end up besieged, with the continual repairs on the pfs a possibly fatal power drain.

I'm sorry about the length of this letter, maybe I should have written it like an article. You would have gotten the information, but I would have had a chance to turn a quick buck. Still a possibility, but I don't feel qualified to write on SC yet, maybe if I had just seen the cover in a store window...

Frank B. Weir, Jr.
Clarion, Iowa

****

16210 Marquis
Cleveland, Ohio 44111
May 21, 1976

Howard Thompson
Metagaming Concept
Box 15346
Austin, Texas

I was intrigued by Mr. Mitchell's article on Stellar Conquest's combat results in TSR #4. It was surprising that he did not include a summary of the result expectations. To correct that oversight I include what could be viewed as an appendix to his article.

PROBABILITY OF COMBATANT ACHIEVING FIRST HIT

	Three ESC	Two ESC	One ESC
Both Simultaneous	.1574	.121	.0714
ATK only	.5278	.637	.7856
ESC only	.3148	.242	.1429

EXPECTED LOSSES GIVEN ESC LOSS ACCEPTANCE*

ESC BREAKS OFF AFTER:	One Loss	Two Losses	Three Losses
ATK	.4722	.6638	.7358
ESC	.6852	1.0853	1.3734

*Losses are cummulative for all firing rounds thru breakoff. The tables were generated using simple Baysein-decision tree

analysis. If you desire a more detailed analysis let me know.

Michael G. Wulk, Jr.
Cleveland, Ohio

Speculations

SPACE WAR GAMES: Avoiding Cliches

by Lynn White

Science fiction was born in the dawning recognition of the newness of the industrial revolution, an event unparalled in human history. Suddenly iron, steam and regimentation had indifferently disemboweled religion, feudalism, mercantilism and rational humanism, leaving the field at last the empiricists and the romanticists from whose bucket we still have to climb free. Pre-18th century fictions are socio-political, religious or outright satire; only around the time of Dickens does the familiar crunch of technology against the personal and social self begin to appear with any regularity.

In broadest outline, we have never left the nineteenth century, for trade, tariff, nationalism, colonialism, slums and existential dread (to name a few) haunt us still. However, Redmond Simonsen (designer of STARFORCE, etc., and SPI graphics whiz and rule cleanser) reminds us that this long century is about to pass at last. I don't mean to say that he had made this discovery without goodly company, but he has done it in a way of interest to TSG readers.

In issue 26 of Moves, editor Simonsen notes that fusion power, full automation and economical transmutation of elements will soon be upon us. Thinking over the possibilities, he wonders how there could be war in such a world, and concludes that the chances would be small (the same point was made in a recent TSG, but I don't have my citation handy, nor my TSG's. His parting words, as wistful as a wargamer gets, I suppose, are worth quoting: "Please don't give me any of that reconquering-the-lost-empire stuff. No space-Nazis. No Templars in space helmets. Leave out the fusion powered feudalism. Cancel the slave-takers with automated laser batteries. In other words, no period-pieces where one changes sword for stun-gun and everything else remains the same. It's not going to be the same."

He is talking about space-war games, begging that readers supply him with some motivation for an interstellar war game that he can respect, rather than feel contempt for with its lame excuse for multi-billion bloodlettings. It is a "three-pipe" problem, galling because a positive solution (i.e., there will be war) condemns the race to an unhappy future, yet a negative solution puts a theoretical damper on TSG's rationale. There is no way to reach a real conclusion, but if we cannot build the whole future in a few paragraphs, we can sketch out a floorplan.

Since the difference between science fiction and a space-war game is only a matter of form, it should be understood just to what Simonsen reacts so strongly. He is saying that societies spring from immediate conditions and historical circumstance, and that it is useless to plug in a few motives and expect the result to resemble anything but hash. For instance, Poul Anderson's delightful High Crusade to the contrary, feudal societies can live only under feudal conditions, among which are the secreting of knowledge, illiteracy, marginal populations, personal administration, uncertain transport, humanpower agriculture, a single religion, primogeniture and an average life span of about forty years. If technology and society do not match, it is apparent that the science fiction in question is really fantasy in drag, salted like a con-man's gold mine with a future frame and a few zippy devices. Anthony Boucher said long ago that most SF fans love fantasy and despise science fiction--only they don't know it.

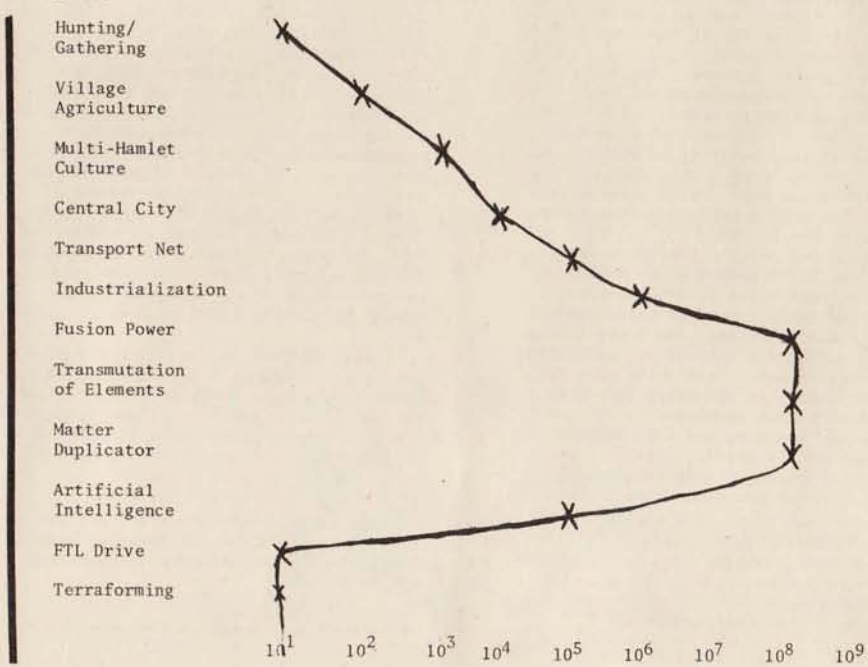
It happens that most space-war games are greatly simplified simulations of the European expansion into Africa and Asia, the general exceptions being that there are no inconvenient native owners of the real estate and that the games allow the colonies production privileges, whereas Great Britain and such jealously limited overseas production. I quote from John M. Snider's STAR PROBE: it "is basically a parallel contest, where the participants, representing separate empires, seek to explore and exploit new star systems for the glory of their governments and the enrichment of their bank accounts--interstellar imperialism indeed!" I think SP is well done, and any player will enjoy it, given half a chance. But it makes me a little queasy when I play it. In his pursuit of jolly freebootery, he has left out most of the definitive aspects of imperialism--government by crony, bribery, racism, guilt, sloth and thoughtless and endless mass oppression (well, that's my taste, and welcome to it). But being neither an accurate simulation of a possible society nor a complete simulation of human motivation, such endless regimented greed leaves one feeling pointless. We do not have to look backward. I don't mean that all astral Pax Britannicas and galactic czardoms should be scotched, because many are simply fun. But we can look forward, as well, and create new societies from the logic within us all.

Every game presupposes a type of universe; the minimum constraints on a gamer

TABLE ONE

	planets very rare	many planets; Earth-type very rare.	all planet types plentiful.
RELATIVITY HOLDS: travel and communication as per Einstein.	no	no	no
RELATIVITY BENDS: sub-light travel; communication at multiple of c or instantaneous.	no	no	marginal possibility
RELATIVITY BREAKS: travel at multiple of c; communication may be instant.	possible	possible	no
RELATIVE TO WHAT? communication and travel instantaneous.	no	no	no

TABLE TWO



Minimum population needed for achievement, assuming achievements as successive steps.

universe seem to me to be speed of travel, communication and the number of usable planets. In Table One, I propose twelve types of universe. The comments in the matrix are my estimations of the possibility of war in the given situation. My guiding logic goes like this: If there are millions of Earth-type planets available in this galaxy, it may still prove very difficult to get to many of them. There may well be a habitable planet for every hundred stars, but fifteen or twenty failed expeditions will make no agency eager for a twenty-first expedition. But, as a matter of fact, habitable planets may be much rarer than our optimistic projections. Our knowledge about neighborhood stars is still in its infancy--even basic data like variability and spectral class differ from authority to authority. A few months ago someone reported finding local G-class stars to be much more often double or multiple (hence little chance of planetary formation) than previously observed. All bets are off until thorough surveys have been made from beyond the atmosphere. If habitable planets are rare, they may be worth fighting over. Terraforming is such a long-term project (in the thousands of years, as far as I can see) that there seems little point in discussing it, though maybe someone can educate me on the possibilities.

To carry the point a little farther, it is the control of rarities which produces status; and it is status which ordinarily drives humans, as it does most familiar creatures except instinctive egalitarians like the wolf.

But Simonsen presses. Why would anyone who has enough Coors and Wheat Thins want to fight, rather than watch TV or fly kites? I suggest that superabundance may be as corrupting as poverty can be, but I do not mean this in the sense of Roman orgies and morality (I suspect that having a few orgies makes one feel rather superior around age 85).

Simonsen's trinity (fusion power, automation, and transmutation) would put an end to large-scale distribution networks (and thereby end the nation-state), and would also eliminate the power to tax and employ (thereby effectively ending all formal government). In a cheap material, automated world, as abundance increases human organization dwindles.

Huzzah, you say, and I admit such dwindling has its points. If you could order, from the local spew-'em-out, an armored division and ten thousand robot Napoleans, your home would be your castle. Unfortunately, you would probably need a castle, because dwindling human organization means dwindling socialization and education. The earth might be crawling with atom bomb-armed oafs.

If one has powers surpassing understanding, why strive to understand at all? The implications of total abundance are as frightening as any other totality. While it is plain that human institutions could evolve to handle such problems, the record of our struggle against such a minor snag as the automobile is not encouraging. There is a good chance that institutions would devolve to a clan or tribal level, since the need for anything more would not be evident for some time.

Humans have been known to fight for entertainment, but I think the juvenile rivalries of clans ensconced in skyscrapers (why limit populations when there's always room for one more?) would be adequate to start lengthy blood fueds. Killing is exciting, I suppose, or at least escaping death is a memorable experience. One does not have to think hard to see status derivations in such procedures. Given artificial intelligence and an FTL drive, what monkeys could be sent to the stars!

Humans need not fight, if freedom does not become punishment, as it does in ghettos, and if we manage to retain the central meetingplaces of the man--the humanities and the social sciences. Eventually things would calm down, for there is obvious need for government in space and in war, but the times, as they say, would be interesting.

I offer this scenario by way of saying that history, real or not, is a real concern to the TSG reader, and that thus far man's ingenuity has led to war and peace as alternately and surely as an accordian is squeezed in and pulled out. It may be as Simonsen suggests--if we manage to roll 6's a few times in a row, the hump will be crossed as permanently as humans can do anything permanently. I am suspicious of the multiple infinitudes he proposes, because it stacks the deck too neatly and too early in the game for satisfactory drama. Mathematicians are suspicious of the infinity sign; gamers have every right to feel the same way.

With respect to the Moves editor's specific compliant, I could not be in greater agreement. The ancient two-fold purpose of literary art, to entertain and instruct, seems to me to be as applicable to space-war games as to any other symbolic artifact. Such a purpose is an honorable rationale for any activity; we will generate more interest and self-respect by doing our own creating than by uncritically appropriating cliches from the hoary past.

- - - -

"This dungeon master doesn't mess-around! There's a Roget's Thesaurus in there!"

chain mail and plate armor don't float that well, and unarmored parties are just a little bit insecure.

Are the Elves and Humans on the expeditions picking on the little people? Set volleys of automatic crossbow fire about five feet off the ground. My personal little variation on this theme guards the most precious treasure on my second level, a giant ruby. In fact, the ruby guards itself. A physics-minded warlock set the cylinderical gem in a silver seat, silvered both ends of it, and placed an actinic light source behind the gem to flash whenever a non-dungeon occupant steps into the room. Light Amplification by Stimulated Emission of Radiation is the phenomenon, and the result is a three-inch radius laser beam that punches a hole in anything five feet off the ground that stands in the doorway.

Adventurers picking up potent magical items in other dungeons and bringing them into yours can be a problem, but if the things are not used very carefully can also be their own solution. A limited wish of "begone from here for four days" drove a 20th level wizard and his company from his own treasure chamber so that the adventurers could leisurely gather up the gold, then use another wish to whisk themselves back to the town of their origin. Of course, it was at that particular town that the wizard had settled down in for his four-day wait... Then there are those magical items that echo Gilbert and Sullivan's "Things are seldom what they seem." When a spell-storing ring is counted on to contain the final dragon-killing lightning bolt and turns out to be a ring of delusion...well, that's one less magic-user to worry about.

If it's a really big game, there're bound to be a number of chaotic or would-be chaotic players around. So be nice to them. Build an all-lawful dungeon for them to explore. And one day, when a Chaotic expedition is down in the Lawful dungeon and a Lawful expedition elsewhere is down in a Chaotic dungeon, well, have the dungeon masters confer and build a connecting passageway between the two. Talk about melees!

But don't let me leave you with the impression that all dungeon masters are, or even should be, out to "get" the expeditions. We just want fair fights and lively adventures in the spirit of the game. That Ogre Magi wasn't deliberately put there to charm you, but rather to charm anybody who couldn't answer the riddle. There was no malice involved when the hobbit-bard stole your fourth-level magic books, or then your +1 magic sword turned out to be cursed with an infinite ego-just attempts to keep the game lively, unexpected, and balanced. But then again, dungeon masters, isn't it nice to know that that half-elf who killed your giant is about to look into the Medusa's lair?

*NEWS/PLUGS

TSR DEFENDS COPYRIGHT OF D&D

TSR Hobbies Inc. recently moved to defend what it considered to be an infringement of the copyright to their game Dungeons & Dragons. In a letter from TSR's lawyers to Richard Loomis of Flying Buffalo Inc. advertisements for FBI's game Tunnels & Trolls were cited as infringing copyright by mentioning that T&T was like D&D. A copy of the letter was also fowarded to Metagaming Concepts, also considered to have violated the D&D copyright in ads for Tunnels & Trolls.

Metagaming Concepts responded by letter to the alleged infringement that:

1. the D&D copyright was not violated in the case of the advertisements,
2. D&D would not be mentioned in future ads out of respect for our good working relationship with TSR, and,
3. it was regretful that expensive legal advice was thought necessary for a matter easily able to be handled by an informal letter.

((TSG has reported this news item with the belief that the actions of the firms that produce the games are important to gamers. Such items will continue to be reported in future issues of TSG.))

BUFFALO DUNGEON

Flying Buffalo Inc. has recently published a fantasy rules booklet for a Dungeon of Richard Loomis' creation. The booklet is $3 and is available from Flying Buffalo Inc., Box 1467, Scottsdale, AZ 85252.

DUNGEONEER

This is a new bi-monthly publication devoted to the enjoyment of Dungeons & Dragons type gaming. It is in a TSG sized booklet format and the first issues was 20 pages. The editor is Paul Jaquay, who has graced our pages with art from time to time. Single issues are 60¢ and a six issue subscription is $3. Write to DUNGEONEER, Paul Jaquay Ed., 3105 Dorothy Ln., Spring Arbor, MI 49283.

BYTE

BYTE is a monthly magazine devoted to mushrooming new hobbyist computer field. BYTE is in an 8½ X 11 "slick" format with a $1.50 single issue or $12 for a years subscription price. The production is pretty professional in tone and all the companies that make computers, components and peripheral have ads. Order from BYTE, 70 Main St., Peterborough, NH 03458.

SHOGUN

SHOGUN isn't a game or an S-F book, it is the best thing I've read in over a year. SHOGUN is James Clavell's latest novel, remember TAI PAN, now available in a Dell paperback for $2.75. If you like those S-F novels that have a lovingly created alien culture, strong characters, and an incredibly involved plot then SHOGUN is going to give you 1,100+ pages of joy. It is based in Samurai Japan in 1600 and is taken from actual history. Every wargamer should take a lesson in patience from the conflict/strategy element of the plot. HT

D-CON REPORT

Metagaming Concepts was at D-CON in the form of a dealer table. Hopefully, D-CON isn't representative of S_F cons in general. D-CON was expensive, in the Hilton hotel, and, sorry guys, deadly dull. The most enthusiasm was for the old movies and in people pawing over the comics in the dealer room. The attendees didn't seem to be having as much fun as the kids at Star Trek Con in Houston I wandered into last year. HT

MONSTERS! MONSTERS!

Metagaming Concepts' latest game release is MONSTERS! MONSTERS!, a well illustrated rules booklet for a fantasy role-playing game with sample maps.

The game was designed by Ken St. Andre, illustrated by Liz Danforth, and produced and edited by Steve Jackson of the Metagaming staff.

MONSTERS! MONSTERS! is different from other fantasy games in that players assume the role of monsters doing evil instead of being hero good guys. The game is $7 ($5.50 for TSG subscribers) from Metagaming Concepts, Box 15643, Austin, TX 78761.

STARSHIP & EMPIRE

This is a tactical space combat game from a new publisher. Advertised as having individual ship combat in detail it isn't clear if planetary defenses are involved. We'll review this when we can get a copy.

Available from R-Squared Games, Box 8314, Salt Lake City, UT 84108.

WYRM'S FOOTNOTES

This is a new publication devoted to fantasy gaming, primarily White Bear & Red Moon. It is 8½ X 11 mimeo and 38 pages with a lot of illustrations. It is published by Greg Stafford, designer and publisher of White Bear & Red Moon on an irregular basis. Signle copies are $1.50 and a five issue subscription is $5. Order from Greg Stafford, Box 6302, Albany, CA 94706.

THE EUROPA NEWSLETTER

This is the irregular publication of Game Designers' Workshop and devoted to their games and activities. The per issue copy is given as 50¢. A free subscription is available for those who fill out the subscription blank that comes with a GDW game. Write The Europa Newsletter, Box 432 Normal, IL 61761.

OUTPOSTS

This is another publication devoted to primarily historical wargaming. It "is the official journal of the Conflict Simulation Society" and is published quarterly. A single issue is $1.50. A one year membership and subscription is $5. Write to: CSS/Mike Stephens, 2 Desmond Run, Sicklerville, NJ 08081.

STAR EMPIRES

This is the long awaited first rules supplement to STAR PROBE from TSR hobbies Inc. The extension covers "the governing of interstellar empires and conducting fleet combat". Cost with the STAR PROBE map is $6, booklet only is $4. TSG/MGC will carry this when available sometime in September and with a discount. Ordering from TSR direct write TSR Hobbies Inc., Box 756, Lake Geneva, WI 53147.

GODS, DEMI-GODS & HEROES

Another supplement to the Dungeons & Dragons rules system that will also be available sometime in September. This supplement allows players "to integrate mythological beings into standard play". This will also be carried by TSG/MGC when available and for a discount. To order from TSR Hobbies Inc. send $5 (after 9/1/76) to Box 756, Lake Geneva, WI 53147.

WANTADS

(Please Note: Due to lack of interest and use this is the last issue of The Space Gamer in which wantads will appear. Anyone having an outstanding ad will receive a refund.)

Looking for fellow gamers. Own Star Probe, Stellar Conquest, am playing Galaxy II. For summer contact Dan Fleming at RD 1, Hudson, NY 12534. Also attend Purdue.

Wanted: PBM multi-player-- Starforce, Sorceror, Stellar Conquest. Send SASE for details. W. Clumm; Entwood, RR #1, Amesville, OH 45711.

Players wanted for Stellar Conquest in my area. Also interested in Empire of the Petal Throne. T. Harms, 2335 Balsam Dr., Boulder, CO 80302.

Advanced Stellar Conquest methods, advanced ships, weapons, defenses, industrial capacity. Stellar Conquest materials required. FREE. $2 for postage and handling. Write: LDS, Box 485, Glenview, IL 60025.

THE RULE TO END ALL RULES

Occasionally, for no known reason (although, personally, I suspect it's caused by aerosol sprays) one is overcome with a great distaste for the entire universe. Such a feeling struck me one night not long ago, as I was staring vacantly at the TRIPLANETARY rulebook. Having no small, furry animals to stomp, I turned to my typewriter instead, and this is what came out:

*Monsters From Outer Space

If at any time during the course of the game, for any reason, the die comes up "6" six times in a row, the solar system is invaded by Monsters From Outer Space. All regular play halts immediately. Roll the die once more and consult the Monster Combat Results Table.

*Monster CRT

1. It was all a mistake. They're friendly. Keep playing.
2. Monsters defeated with moderate losses. Remove half the spaceships.
3. Monsters defeated with heavy losses. Remove Mars, Jupiter, and half the spaceships.
4. Both sides blown back to Stone Age. Remove everything.
5. Monsters enslave human race. Game ends.
6. Monsters destroy human race. Game ends.

Cleraly, an adaptation of this rule could be used to wreak havoc in practically any game. Have fun.

--Steve Jackson

FEEDBACK & GAME RATING

Your are right, we did miss mentioning the Worst SF&F Game of 1975 on the feedback form. So, in order not to let any deserving game miss its full chance at the honor, we will do the voting again. The five games with the most nominating votes were STAR RAIDER, BATTLE OF FIVE ARMIES, 4,000 AD, RIGELLIAN WARS, AND WAR OF THE WORLDS II. There is space for the voting on this issues feedback form so let us know your particular favorite "worst" game.

TSG #5 FEEDBACK

The most notable thing about feedback on TSG #5's content is the much higher rating for the art. We are getting a good selection of art from our contributors. What also helped issue five was the fact that we shifted to a heavier grade of paper that takes offset printing better than the minimum grade used in previous issues.

The other thing to note is that the general level of the ratings has gradually dropped from issue to issue. That could be from several reasons. One reason is that as our circulation increases we get more readers who aren't exclusively hardcore SF&F gamers. Also, the newness wears off and we get compared more to other professional publications instead of small amatuer efforts. As we do better in content and appearance we raise readers expectations. All these things combine to give us a gradually lower rating history as our format and content are actually improving. Or, maybe we are not doing as well as we think. Be sure and tell us if you think we're missing the mark altogether.

The ratings of last issue's are below. The rates are on a scale of one (low) to nine (high). The service type features like ads, letters, and Where We're Going are not rated as usual.

ARTICLE	RATING
Laser Weapons	6.97
Issue # 5 Overall	6.87
Issue # 5 Art	6.77
Sorcerer and WAR:Review	6.57
Interstellar War	6.36
Eldon Tannish #5	6.36
Ship Effectiveness in SG	6.36
Allocation of Bonus IU Output	5.96
The Ythri: Review	5.76

SF&F GAME RATINGS

Results from our first new style game ratings are shown below. Response was good and with your continued feedback and participation gamers will have the type of data they need.

The first number to the right of the game name is the Overall rating for how well that specific game was liked. The next number represents the Type rating for who well that type of game was liked. All ratings are on a one (low) to 9 (high) basis. The games are grouped by general type classification. We did get some comment on our classification of games and invite more.

GAME	Overall	Type
Fantasy Role Playing Games		
Empire of The Petal Throne	7.7	8.3
Dungeons & Dragons	7.7	7.7
Greyhawk (D&D Supp. #1)	7.4	7.7
Tunnels & Trolls	5.5	7.6
Royal Armies of Hyborean Age	5.2	5.0
Blackmoor (D&D Supp. #2)	5.2	7.2
Chainmail	4.8	6.2
Citadel	3.5	5.5
Fantasy Board Games		
War of Wizards	6.9	7.1
White Bear & Red Moon	6.7	6.8
Sorcerer	6.7	7.3
Siege of Minas Tirith	5.3	6.4
Dungeon!	5.1	5.5
Battle of Helms Deep	4.2	5.6
Battle of Five Armies	3.5	4.5
Planetary Tactical Combat Games		
Starguard	6.8	7.0
Future Society Level Games		
Stellar Conquest	7.6	8.1
Starlord	5.9	7.0
Lensmen	5.7	7.6
Star Probe	5.6	7.6
4,000 AD	2.6	5.7
Space Tactical Level Games		
Starforce	6.8	7.7
Triplanetary	6.3	7.0
The Ythri	5.8	7.0
Alien Space	5.5	6.4
Fomalhaut II	2.8	5.1
Star Ship Combat	2.3	4.6

THE EMPEROR IS DEAD

or

THE RACE FOR THE PETAL THRONE

by Robert L. Large, Jr.

The Seal Emperor, Hirka'ne Tlakota'ni, has just died at the age of seventy-three in the year 2357 A.S. The Azure Legion has brought the aspirants for the Petal Throne together at Avantha'r to begin the contests for the determination of the new Emperor.

The contestants are: Lord Eselene' (protege of the family of Ke'ttukal), Dhich'une (ninth level adept studying with the priests of Sa'rku), Rereshq'ala (protege of the Clan of the Sea Blue- the most powerful clan in the Royalist Party), Mrid'obu (protege of the Priest-Lord of Avantha'r), and Kryth'ai (the only daughter declaring Arid'ani status--supported by the priestesses of Ava'nthe and Dlame' lish).

There are three contests used in deciding the new Emperor. One--an arena duel to the death between each candidate, individually, and an opponent of equal status. Each claimant to the Throne draws for the order in which he/she will fight. The opponents have been determined, in order ahead of time. Two- each candidate is placed in a trick/trap room constructed by the Azure Legion. All rooms will be the same, and there will be one for each Level Two candidate. The object is to survive. They either find the way out (or a way), or they die. Three--each aspirant must make a descent into the underworld. All contestants descend at the same time through different entrances. If a candidate fails to return within a specified amount of time he/she is eliminated. There will be some object that they must bring back; however, it is never decided upon until the last minute. If after all three contests there remains more than one contestant, the survivors are placed in the arena, all together, in a duel to the death. The last remaining individual is proclaimed the new Emperor.

Lord Eselene' drew number one in the arena combat against Hav'ak, another eighth level warrior and winner of five arena duels. The weapons to be used were sword and shield, and both warriors were dressed in leather armor. (daggers were also carried)

Both fighters entered the arena and saluted Zam'is, the presiding member of the Charuk'el (the hereditary clan of major domos of the arena). After the traditional salute the duel began! Both men did little more than feel each other out during the first minutes, and several jabs were easily parried by each man.

Suddenly Eselene' aimed a powerful blow at Hav'aks' throat. The blow was parried and Hav'ak quickly counter-attacked. Eselene' took a serious wound to his left arm which gushed blood over both men. He tried to keep his shield up to protect the arm, but (though successful so far) knew he could not hold it up for long. Eselene' came back with a weak down thrust and then brought his sword up in a powerful cutting motion aimed at Hav'aks' groin. Hav'ak managed to parry the blow, but the resulting numbness, caused by two pieces of steel meeting each other while being driven with Herculean force, weakened his hold on his weapon, and he dropped it. This left Hav'ak with only a dagger and at a strong disadvantage since swords strike before daggers. (using GLADIATORS - Fantasy Games Unlimited Inc.) Eselene' was overconfident in the next melee round, and Hav'ak slashed him inflicting a minor hit in the chest. This brought groans from the spectators, for they now saw a royal aspirant to the throne covered with his own blood and as yet having inflicted no wounds on his opponent. Eselene' himself knew that he must score some hits on Hav'ak and quickly. He was losing a great deal of blood and growing weaker. Soon he would not be able to hold his shield. On the next melee round he took advantage, at last, of Hav'aks' dagger with a powerful downward slash which the short weapon could not parry. As Eselene's sword cut into the shoulder he twisted his wrist causing the weapon to gouge out the flesh to the bone. Torn muscle hung from Hav'aks' wounded body and his left arm swung at his side with no control left. Eselene' saw from his opponent's eyes that he need only strike the finishing blow. There would be no further danger from Hav'ak. The glazed eyes, both arms now hanging at his side, shaking body, all were signs of extreme shock. Eselene' drove his sword through Hav'aks' chest and released it, leaving the body semi-propped on the bloody point as it fell to the ground.

Rereshq'ala followed Eselene' in another gladiator duel with sword and shield. It was fought in the same manner with the same skill shown but with different results. Von'gur, Rereshq'alas' opponent, inflicted a fatal wound to the midsection twenty-two minutes into the duel and watched the lifes' blood and internal organs drip out onto the ground as his opponent died. The royal candidates were now one and one.

The next three contests were all to be with magic. Therefore, the arena was surrounded by ninth level (at least) magic-users who placed a "protect" spell around it. In this way no spectator would be harmed by the magic spells used in the arena. Mrid'obu was meeting Thau'kha for the third contest of the day. (WAR of WIZARDS rules)

Two minutes into the duel Mrid'obus' UNDEAD PRIEST hit Thau'khas' SHIELD OF DEFENSE eighty yards away and was killed. Roughly eight minutes later Mrid'obu destroyed an advancing SHE'N (leaving another one) with poison arrows. He missed an AQAA with an ENERGY BOLT. Shortly after, Mrid'obus' WIND WALL met an approaching FIRE WALL. Both took two points damage and moved passed each other. The WIND WALL then destroyed the AQAA creature losing two more points itself. Thau'khas' three advancing FRESH' ENGA then ran into a DLA'KOLEL and were destroyed. A few minutes later Mrid'obu had a DEMON meet two HRA'. The DEMON and one HRA' were destroyed, while the other HRA' was seriously wounded. Mrid'obus' WIND WALL was destroyed by an enemy STONE WALL, and the same STONE WALL crushed the advancing DLA'KOLEL while losing nine points itself. About then Mrid'obu thought he had better cast an INVULNERABILITY spell (lucky for him) to combat the possible approaching spells he couldn't see. It immediately ran into a DOOMKILL spell. Combat took place with only two points damage to the DOOMKILL before they passed each other. Mrid'obu took eighteen points damage. Mrid'obu was beginning to worry. He had not been able to get past Thau'khas' defenses yet while already taking damage himself. Thau'kha had a FIRE WALL already close so Mrid'obu cast a WATER WALL to meet it. He failed to stop it, although it was reduced greatly, and took three more points damage.

Meanwhile in the middle of the arena his two HLY'SS met a STONE WALL and scaled it only to meet a SSU' and HRA' on the other side. They moved into the HRA' first and killed it, while both HLY'SS took severe wounds. The SSU' then attacked, destroying both of the wounded HLY'SS. Mrid'obu hastily cast an ENERGY BOLT to stop the SSU' and killed it forty yards from his station. Thau'khas' advancing FIRE WALL destroyed an opposing WATER WALL eighty yards from Mrid'obu. Mrid'obus' advancing DEMON destroyed the advancing FIRE

WALL that had caused so much trouble so far and a single PE'CHO'I just behind it. Both men had blocking WALL spells thirty yards from Thau'kha (WATER, STONE). Thau'kha threw an ENERGY BOLT to try and break up the WATER WALL. The WALL suffered damage, but it took a second BOLT to destroy it. Mrid'obu threw a DISPEL EVIL into an advancing SILVER HALO and caused three points damage. Another quickly thrown DISPEL EVIL caused another three points damage, but the HALO won through and hit Mrid'obu causing nine points of damage. Two opposing DEMONs met forty yards from Mrid'obu, and Mrid'obus' was destroyed.

Finally, after almost twenty-five minutes, Mrid'obu broke through Thau'khas defenses. He hit him with an ENERGY BOLT doing eight points damage. Another BOLT broke through Thau'khas' SHIELD OF DEFENSE and was fast approaching. At the other end of the arena another set of DEMONs met with Mrid'obus', coming out on

top this time. Towards the end of the first half hour things became a little more hectic. Mrid'obu had a reinforced DOOMKILL meet the opponents INVULNERABILITY spell and easily broke through, doing twenty-three points damage. Thau'khas' hastily cast DEMON destroyed an advancing DEMON twenty yards away. Another ENERGY BOLT hit Thau'kha, doing twelve points damage. All of a sudden things were looking much better for Mrid'obu. He had gotten a number of powerful spells past Thau'kha while taking little more damage himself. Both men were tiring, however, and unless the few remaining spells on the field were able to end the contest it would come down to hand-to-hand. Mrid'obu broke the opponents defense with another reinforced DOOMKILL doing thirty points damage, while he took another nine points from a SILVER HALO.

This cleared the arena of all spells, and neither magic-user had the strength to cast more. Advancing toward each other slowly, they met in the center of the arena. Both were armed with daggers and rapidly diminishing strength. Mrid'obu scored first with a slash across the chest of Thau'kha (four points damage). He followed up, while Thau'kha was off balance, and slashed the arm (two points damage). Thau'kha fought back, slashing Mrid'obus arm (four points damage). Mrid'obu, knowing he could not keep fighting long, took a chance and thrust at Thau'khas' middle (while leaving himself open for the same) and took Thau'kha by surprise. Thau'kha fell to the ground mortally wounded, thus allowing Mrid'obu to advance to the second round.

The other two magic contests were fought in a similar manner with Kryth'ai defeating Qa'ash and Dhich'une losing to Tay'adur. Thus three of the royal candidates had succeeded in advancing to the second round (Eselene', Mrid'obu, and Kryth'ai) while two of their brothers had been killed (Rereshq'ala and Dhich'une).

The second of the three contests was the ingenuity trap. It was scheduled to take place in two weeks, thus giving the three remaining aspirants time to fully recover from the wounds suffered in the arena contest.

On the day of the second contest each candidate was given the following clue to take into the test with them. (the rooms had been constructed by the Azure Legion)

> "Beware of the simple things in life. Fortunes are often made by hard work and strife. High rewards come to those with strong bodies and pure thoughts. Of free treasure offered take only that which you need. Panic and patience always receive their just rewards; however, extremes in either bring disaster. Let those who excel in thought and deed exit this room to meet the Empires' need."

All three candidates, Eselene', Mrid'obu, and Kryth'ai, were put into identical rooms, which were then locked and sealed. Upon entering, the candidates saw that they were in a room approximately sixty feet by eighty feet. At the opposite end from their entrance, seventy feet away, there was a statue of the God Thu'mis, Lord of Wisdom, with several piles of treasure stacked around it. There appeared to be ten to twenty eyes, a large number of gold ka'itars, and one hundred or more gems and jewels. About thirty feet from the statue was a door. On the right of the entrance area was a panel with three levers on it and to the left, about forty feet away, was a chest of some kind.

Upon observing the contents of the room, Eselene' sat in the middle of the room to read over the clue once more. He attempted to relate the items in the clue to the items in the room. He eliminated the door as a means of exit, because it would be much too simple. Strong bodies and pure thoughts could only relate, as he saw it, to the statue of Thu'mis. It was the only object that was heavy enough to require strength to move. As for the treasure around the statue, he needed none of it since he would either find an exit, thus advancing to round three in his quest for the throne, or he would die here. Either way he would not need any of the treasure found here. As for the last part of the clue, he had no fear of panic. His only concern was how long he could think about the problems before acting. So far only the statue seemed to relate to the clue but he decided to check out the chest before commiting himself. He found that the chest, to all appearances, was not locked and was not heavy when he tried (carefully) to lift one end. He next looked at the three levers on the opposite wall. They appeared to be simple lift (up/down) type levers with no markings of any kind. Finally, Eselene' went to the statue of Thu'mis. He carefully tried to turn it but could move it neither left or right. He tried to tip it, with no results. He was now somewhat puzzled, having thought the statue to be the key to the problem. He still did not wish to try the door, and the three levers were, to him, like playing the odds against ones paying ones taxes. This left only the chest. He had already spent considerable time and was beginning to worry about how much time he might have left. Therefore, he decided to open the chest, if possible. The chest opened very easily but contained nothing; however, there was a sliding noise to the left and .....

Meanwhile, Mrid'obu had spent considerable time studying the clue also. He came to much the same conclusion that Eselene' had but felt one of the "eyes" piled by the statue might be the key. If he could find it then he would have a "need" for that part of the treasure, and it could be safely used. He did not like the idea of the levers, but he felt his psychic ability might give him a chance with them. Therefore, he started checking the "eyes", careful not to touch them, finding some with inscriptions and some without. He finally found one that said it was to increase psychic ability by thirty percent. This was the first "eye" that might be of help to him so far. Mrid'obu quickly scanned the rest and found nothing else of value in this situation. He gently lifted the "psychic eye" from the treasure pile and held his breath. At first nothing happened, and then he heard a voice from the panel with the levers. "You have activated a Fail Safe system. In exactly two minutes the room will fill with poison gas, unless the levers are pulled in the correct sequence A verbal count will begin with thirty seconds left." Mrid'obu was not too worried since with his original psychic ability plus the thirty percent increase he had one hundred four percent chance of choosing the right lever first. He concentrated on the three levers and confidently pulled down lever two. "You have made the correct choice. The time sequence will not start again until the end of this message. Psychic ability will be of no help on your next decision; however, in all fairness the following clue will be given:

> "Karak'an, the God of War, favors those who act forcefully, putting both the shield and sword to good use."

Mrid'obu stared helplessly at the remaining two levers trying to determine the key to the clue he had been given. Just then the voice started counting, 30, 29,28,27,.....All of a sudden Mrid'obus' fact broke into a smile, and he stepped up to the panel and pulled both levers down at the same time. He stepped back to await the means of escape, but the voice went on counting. Mrid'obu started to panic. Should he try something else! Yet he was sure he had made the right decision!! The voice continued to count, 10, 9,8,7,.....

In the third room Kryth'ai was now ready to make her attempt to escape. She had decided to try the three levers but wanted to test a theory first. In the original clue given to the candidates one statement had started her thinking. "Of free treasure offered take only that which you need." She reasoned, as the others had, that she had no need for any of the treasure, since she would either end up on the throne or dead. She further reasoned that she did not even "need" what she already had. Upon checking she found that she had only a jeweled pin, used to hold up her cloak, with her. If her theory was correct, adding the pin (valued at only 500 ka'itars) to the treasure pile might prove very helpful. Therefore, before attempting the lever panel she placed the pin on top of a pile of other jewels at the foot of the statue and stepped back to observe the results. The two eyes of Thu'mis lit up and a voice said, "Your generosity has been noted. Pull the third lever on the wall and step through the door to your right." Kryth'ai hesitated only a second before deciding that her chances were as good this way as any she might come up with and if her theory was correct then they were much better. She followed the instructions and entered a thirty foot by thirty foot room with a large disk, in the middle, set into the floor. There were no apparent exits from the room and it contained nothing but the disk. The voice again spoke, "You have only to think of where you wish to be and step onto the disk." Kryth'ai had a moments uneasiness about the clue- "Beware of the simple things in life."-; however, she decided it was too late to back out now. Stepping onto the disk she disappeared.

As Kryth'ai disappeared, Eselene' was turning toward the noise on his left. He saw a secret door opening in the once solid wall. Before he could even think about the possibilities of an exit a man-like creature, doughy and blubbery looking, with two saucer-like eyes and a greyish beak charged into the room. He recognized it at once as a Thu'nru'u or an "Eater of Eyes". Eselene' quickly drew his sword to meet the creature's attack. The Thu'nru'u was heavily armored (blubber and rolls of skin) compared to Eselene's leather armor but Eselene' appeared to be the stronger. Both combatants took several hits in the first few melee rounds and it looked as though either would be done for with another hit. Unfortunately, for Lord Eselene', the Thu'nru'u scored first. He died at the feet of the "Eater of Eyes" not knowing that around its neck was an "Eye of Departing in Safety" which had been pre-set for the ground outside the test area.

.....,6,5,4,3,2,1. As the voice reached the end of the time sequence Mrid'obu felt a draft of cold air hit him in the back. He turned and almost collapsed with relief as he saw that the entire wall where he had entered the test room was gone and an official from the Azure Legion was standing there, with Kryth'ai at his side, to greet him.

Only he and Kryth'ai had come through the second contest. The third contest, a descent into the underworld, was scheduled for one week from now. Both aspirants would lead five mercenaries into the underworld to find, kill and bring back a Ru'un (usually found three or more

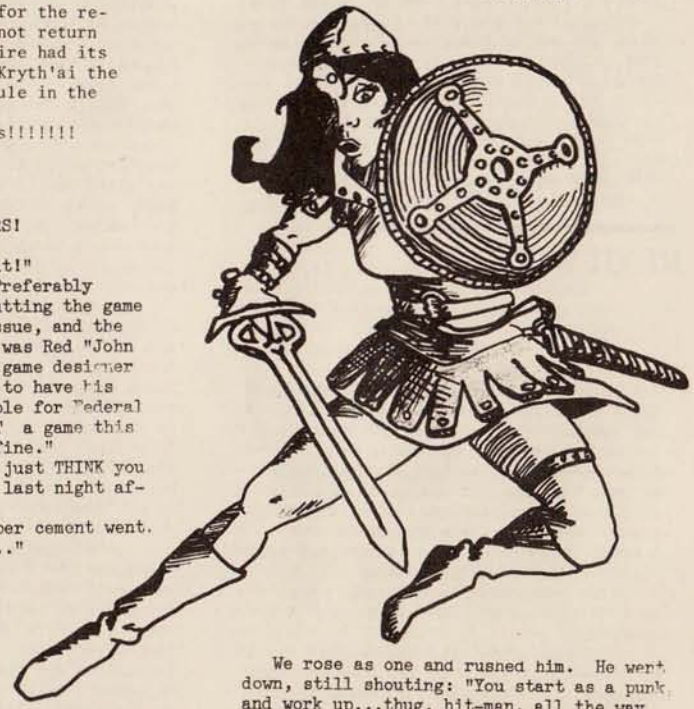
out of the room and into another room with a large bolted chest or box in the center. There was an inscription on the top of the box. Kryth'ai translated this as saying, "Radioactive - dangerous". None in the party knew what radioactive meant but they had no trouble with the word "dangerous". They all knew that it was things of this type, according to legend, that the Ru'un were designed to guard. Therefore Kryth'ai threw the bolt on the top and stepped back, having no intention of opening the chest unless absolutely necessary. All warriors and Kryth'ai were watching and waiting. Almost immediately a Ru'un appeared from nowhere. It threw two steel bolts before anyone could react, killing one of the warriors. Kryth'ai pointed the "eye" obtained from the Ngo'ro and pressed the activating stud. An enormous net-like substance flew towards the Ru'un but it reacted in time to avoid it. He engaged one of the warriors in combat while throwing another steel bolt at another. (it missed) The warrior engaged in personal combat threw himself on the Ru'un, yelling at Kryth'ai to use the "Eye". She fired the "Eye" twice and then the power apparently ran out. The warrior held the Ru'un immobile, however, just long enough for the net to reach him. There was a great shower of sparks and the Ru'un fell to the floor. Both it and the warrior were dead. This left Kryth'ai and two warriors to bring back the Ru'un. Kryth'ai used a "Change Others" spell to change the dead Ru'un into a small white mouse and started the remaining members of her party back towards the workroom. Just as they were almost to enter the moving room they were attacked by a Nga'ya which Kryth'ai hit with a DOOMKILL spell. The party entered the small cubical and Kryth'ai remembering which button had been lit when they first entered the room, pushed that button hoping to return. As the wall once again slid open the group was met by three small Chne'lh. They managed to destroy the creatures but lost another warrior, while the last remaining suffered a serious wound to the shoulder. The remaining two members of the original party started up the long stairway that they had descended so long ago. As they entered the room off the stairway they met eight Ku'rgha (Eaters of Carrion). The wounded warrior killed three of them before he was overrun by the others. Kryth'ai destroyed three more while they were feeding on the body of the dead warrior. She took two serious wounds herself before disposing of the other two. Kryth'ai then ascended the entrance stairs out into the open. She asked the Legion officer waiting for her to bring someone capable of reversing a "Change Others" spell. It was done and the white mouse again became a dead Ru'un.

The Azure Legion waited for Mrid'obu levels below the surface). The farther down the more likely one will be found. There is a one week time limit for the candidates to satisfy the conditions of the test. Both will descend at the same time, but at different entrances, into the underworld beneath the City of the Dead in Jaka'lla.

Both Kryth'ai and Mrid'obu prepared their parties for the descent by arming themselves with leather armor and three steel daggers and their men with plate armor, steel shield, sword, dagger, and bows. Each party was lead to a separate entrance by an officer of the Azure Legion.

Kryth'ais' party descended the stairs leading down quickly, into a small, empty room with two doors. Kryth'ai had two of her warriors open one of the doors, prepared to fight. This door opened into a stairwell, which the party descended. The stairs seemed to go down for a very long distance, much farther than just one level. Kryth'ai had the party slow down and search for secret doors but none were found. Finally they came to three doors and the end of the stairs. The same two warriors opened the left hand door and the party stepped into a large rectangular room (roughly fifty feet by ninety feet). There were a number of tables and chairs placed haphazardly around the room and on the far wall there was a small room (four feet by six feet). Kryth'ai checked this room and found nothing but a panel with a lot of buttons (with numbers on them). She had heard rumors during her training about such rooms. If one pushed a button then the room would go either up or down and then open at another place. Thinking of the time limit placed on them she called her warriors into the little cubical and explained what would happen. Kryth'ai then pushed a button with the number ten on it. A sliding wall closed off the opening and the floor seemed to drop away from them. In what must have been only seconds they stopped and the wall opened again. Kryth'ai looked out into what seemed to be a workshop of some kind. There was broken glass and tables scattered around the room. The party advanced into this "workshop" carefully searching for any possible danger. All of a sudden one of the warriors let out an agonized scream. The others rushed to him but he was already deep in the folds of a Ngo'ro. The remaining members of the party managed to subdue the creature but their companion was dead. The Ngo'ro offered the party one of its magical weapons to spare its life and they agreed subject to seeing the type of weapon. The only weapon of any possible use to them was an "Eye of the Drowning Seeker" (it throws out a web-like net of jelly that encloses its victim and then breaks down into water). The agreement was made and the party and Ngo'ro went separate ways. Kryth'ai led her group to return, as did Kryth'ai, for the remainder of the week. He did not return and was never found. The Empire had its new Emperor (Emperoress!!). Kryth'ai the first - the third woman to rule in the Empire's history.

Long live the Emperoress!!!!!!!



MUGGERS! MUGGERS!

Steve Jackson

"I've got it! I've got it!"

"Well, try penicillin. Preferably someplace else." We were putting the game together for this month's issue, and the last thing we wanted to see was Red "John Galt" Darnigame, free-lance game designer and the only man in history to have his mind officially ruled eligible for Federal disaster relief. "We've GOT a game this month, and we like it just fine."

"Oh, no, you don't. You just THINK you have a game. I was up here last night after you guys left..."

"So THAT'S where the rubber cement went. Darnigame, I'm warning you..."

"And I looked it over. Another fantasy role-playing job. When are you guys getting back to the real world?"

"The what?"

"The real world! Out there. Squalor, filth, pettiness, hatred--the real stuff of life. Now that game you've got has possibilities, I'll admit--it just needs the old Darnigame touch."

"We'll touch YOU, Red, if you don't clear out and let us work."

"Tch, tch. Bad roll on the Reaction chart. No, listen. Even the name is almost right. Just a little change. See, you make it MUGGERS! MUGGERS!..."

He ducked as a handful of percentage dice caromed off the wall behind his head like red-and-white bullets. "They come up out of the subways, trying to score, and head for Central Park, avoiding the fuzz."

Stepping to the side, he avoided a falling bookcase. "I've got a plan here of a 50-story apartment house, with 6,029 non-player characters and their attributes." He waved a ragged sheet of paper. A pair of scissors spun through the air and pinned it to the wall. "Very nice. Dexterity 18. Now, as I was saying..."

"Only 16. I was aiming for your HAND. GET OUT!"

But Darnigame was in full cry. "Smoke-belching monsters...Cougars, Firebirds, Gremlins, Bugs...Junkies get 50 experience points if they're burned, 100 if they OD and live...Wandering Turkey table..."

We rose as one and rushed him. He went down, still shouting: "You start as a punk and work up...thug, hit-man, all the way to boss and Godfather..."

We dragged him, kicking and screaming, into the inner office, where a shipment of games awaited unpacking. Emptying the carton, we gagged Darnigame with a half-dozen back issues and stuffed him in. Somehow, he continued his tirade: "Switchblades only 1-die weapons, bicycle chains 3, broken bottles 2 with 2 adds...mmmmfff...leather jackets take 2 hits...saving roll against Mace..." We slapped tape on the carton and pushed it out into the hall. "Instead of elves and orcs, you got fairies and narcs...I stole that, but nobody'll catch it...mmmggg..."

We addressed the carton and left it by the mailbox. As we headed back to the office, with the warm feeling that comes from finding the creative solution to a problem, we heard, dwindling behind us... "There's a melee scenario based on 'West Side Story,'...use miniatures, or just slug it out yourselves..."

With Red out of the way, everything went quite smoothly-so, at last, we've implemented our game-in-every issue policy. Unfortunately, there's a little difficulty this time around; the 40-odd typed pages of MONSTERS! MONSTERS! had to be reduced drastically to fit the TSG format, especially since we had so much other material this issue. But we managed. If you'll look closely at that smudge on page 8, you'll see it's actually very fine print. Get out your magnifying glasses, and han-

py gaming. (Extra copies, in somewhat larger print, are available at reduced prices to subscribers--see the order form)

After it was all over, though, a few of us had second thoughts. As we relaxed over our beers, somebody asked, "Do you really think we should have done it? About Red, I mean. It WAS a bit much."

"Sure. Just because they're the big guys in the game business doesn't mean we can't help them out once in a while. They NEED somebody as creative as Red."

"Yeah, I guess so. But postage due?"

REVIEWS

THE YTHRI: An Historical Appraisal

by Norman Howe

Metagaming Concepts's game THE YTHRI recreates the major battle of the war between the Domain of Ythri and the Terran Empire, as depicted in Poul Anderson's novel The People of the Wind. Because the game was designed primarily as a space invasion game, certain unique events in the battle were omitted. As a result, THE YTHRI does not portray the battle as it actually occurred (which would be predictable and boring), but as it might occur, under different conditions.

In Anderson's original version of the battle, Terra declared war against the Domain of Ythri in the course of "stabilizing its borders". An armada, commanded by Admiral Juan Cajal, was sent to defeat the Ythrian space fleet and occupy certain strategic worlds, including Avalon, a biracial colony of humans and Ythrians. The armada was split into thirds, and one portion sent against Avalon. The other contingents were to attack their objectives when Avalon was controlled.

The Marchwardens of Avalon--the Ythrian Ferune and the human Daniel Holm--had prepared their world for such an attack over many years. Orbital defences were unusually strong for a colony world, and ground energy projectors on Avalon and its moon Morgana supplemented a space fleet half the size of the Terran contingent.

The Terran Fleet crushed the Avalonian spaceships with difficulty, but could not breach the orbital defences. A small contingent of spaceships was left to guard the planet, while the main fleet went onward. In a few weeks, Avalon was the last remaining enclave of Ythrian resistance; even the homeworld, Quetlan, had fallen. The Terran Fleet returned to conquer Avalon.

Avalon continued to resist, even when a nuclear blast destroyed Centauri City, one of the two human-dominated centers. Admiral Cajal had no wish to appear a monster, and sought a way of conquering Avalon without destroying the world. He grasped at information provided by an escaped prisoner, which hinted at the vulnerability of the large equatorial continent. Terran troops were landed in that area, and a base was established. Too late, it was discovered that Equatoria was undefended because it harboured remnants of Avalon's native ecosystems. Long-term intrusion by civilization would destroy the ecology; in the short run, the plants, animals, and heavy metals crippled the Terran force. The remnants of the Avalonian space fleet returned from hiding, shot past the Terran force and blockaded attempts to evacuate the men.

At this point, Avalon "surrendered" to Admiral Cajal. They provided medical aid to the Terran forces stranded on Scorpeluna Plateau. As a result of these actions, Avalon was able to negotiate its own peace terms. The conditions of the treaty with Quetlan were already fulfilled: there were Terran troops on Avalonian soil, even if they were all in hospitals. In the end, Avalon remained in the Domain of Ythri, and was not absorbed by Terra.

In Metagaming's version, THE YTHRI simulates the first part of the Anderson's Battle of Avalon quite closely. The Terran fleet hopelessly outclasses Avalon, both in numbers and in relative composition by strength. However, the Guardian Satellites are not as effective as Anderson's novel would suggest, and may be destroyed quite easily. This may stem from the original intent of the Terran player, who would quit if the Avalonians were that strong. In a very short time, the defender's defences are down and troops are landed on Corona, the inhabited continent.

From this point on, it is a war of attrition. Unless the Terran player has been foolish and split his forces (or worse, lost some of the transports before landing), it is a simple task to capture three Choths or cities and win the game by turn 12. Of the optional rules, the only one which has a substantial benefit for the Ythri is the Ground Energy Projector option.

Thus, THE YTHRI depicts the Battle of Avalon as Admiral Juan Cajal of Terra would like to have seen it. The Avalonian Player has little chance of winning.

To make the battle a more challenging proposition, I suggest the following changes to THE YTHRI:

1. Give the Avalonian player more Planet Class ships. Three are insufficient to produce the effect described in the novel, and there are too many Supernova Dreadnaughts. Mr. Anderson suggests that each side had one such vessel; the greater number in THE YTHRI were probably included to provide some class differentiation without requiring too many counters. To beef up the Avalonian space fleet, use an extra three Planet Class Cruisers.

2. The Guardian Satellites should be more numerous and less vulnerable. I would suggest that the third GS counter be used in the starting setup. Also a step reduction from 4-3 to 2-3 could be included. This will greatly improve the usefulness of the satellites.

3. The Terrans require more ground troops. The key to Avalon's defense was its space fleet and satellites. But for these, the small ground forces would have been obliterated. Only the ecological balance on Equatoria prevented the world from being overrun once the Terrans had landed. Give Terra four more BT points and four more AT points.

4. Historical Scenario: Use the setup in the standard rules, plus the GEP option and the variations given above.

a. Withdrawal of Forces: On game turn 7, the Terran Player must withdraw all remaining spaceships, including unlanded troops, from one edge of the map to conquer the rest of the Domain of Ythri. If any Ythrian spaceships (SM or PC only) remain, twice that number of Terran ships must remain to guard the planet. On Turn 12, the Terran player returns with a fleet equal to the original starting setup.

b. Ythrian Recovery: If the Terran ground troops landed before turn 7 have been destroyed before turn 12, the Avalon Player may replace on the map one-half the friendly troops lost in combat. As well, any GS units reduced to 2-3 units may be raised to 4-3s again.

c. Victory Conditions: The Terran Player must capture all City/Choth Bases before turn 18 or lose the game. Add 3 turns to the standard Victory Conditions.

The changes suggested above will have a drastic effect on THE YTHRI in general, and I would not recommend their use except to create a scenario appropriate to the ogirinal battle. One final note: The Scorpeluna Landing option cannot be simulated realistically without a great deal of trouble. Avalon is a moderately large world, 11,000 km. in diameter. The ground combat map shows only Corona and a small portion of Oronesia, on a scale I would estimate at 200km./hex. This is reasonable, as a colony world's population and technology would be concentrated in a fairly small area. However, this places the Equatoria continent about 80 hexes away on the far side of the planet. Most of the intervening area is ocean, and contains only small islands. Although the operation was planned and executed, to simulate it would require considerable expenditure of time and energy, and possibly a new game.

In conclusion, THE YTHRI is a fine game, with great potential. It's one of the few I've seen which provides sufficient numbers of spare counters to work with. This versatility definitely outweighs any problems with the basic scenario.

R. R. #3
Clarion, Iowa 50525
May 28, 1976

RAND'S WAR OF THE WORLDS II

by Tony Watson

The name, WAR OF THE WORLDS II, implies that there was a WAR OF THE WORLDS I. Luckily for us, Rand didn't bother to make a game on that conflict as well, as War of the Worlds II is quite enough, thank you.

This game is another of the series put out by the Rand Corporation on a subscription-only basis. It is the group's first Sci-fi entry. Like many of their previous games, this selection is of questionable quality. However, I don't feel that the game fails for any lack of effort or originality on the designer's part. In physical appearance the game has many nice touches. It comes in a metallic silver slipcase which has a window that shows a very attractive artist's rendition of two interceptors in combat, as well as some futuristic lettering for the game's title. Such aesthetic touches may not mean much to some gamers, but I appreciate them, and feel in this instance, they display the effort that went into the game. The counters are excellent. They are large-sized and include one thing I love: when you punch them out, the corners come out rounded so you don't have to spend a lot of pre-game time trimming them. There are three colors of counters: blue, green and yellow. Each counter bears a very nice drawing of the unit it represents, either spacestation/base, interceptor or command ship. As I said, the drawings are very good and I feel they add quite a bit to the flavor of the game as well as being visually pleasing. The map however, is not as easy on the eye, being cream or chocolate in color; a matching that reminds me more of a bakery than the outer reaches of space. The main playing area, a circular grid, as well as the local planetary space for each of the five planets are located on the map.

WAR OF THE WORLDS II is a strategic game, but the game-altering decisions are made on the tactical level. The only pieces that move on the strategic map are the five planets (which revolve in circular orbits) and the three command vessels

of each player. Bases, stations and interceptors are either on the planetary surfaces or carried, hidden from the opposition's inspection, in the cargo holds of the command ships. The basic idea of the game is to control more planets than the enemy. Most likely you will have to fight to gain control, and this is the game's real appeal.

Once attacking command ships have entered the local planetary space (provided they have displayed any defending command ships) combat begins. There are three zones above each planet in which combat takes place. (They are mislabeled on the map. Zone 1 should be zone 3 and vice versa.) Players must follow a fairly intricate procedure, and this is where a little thought comes in. The defender first places his space stations in any of the zones, then he places interceptors in the outer zone. The attacker must "neutralize" this zone with at least one attacking interceptor. The same procedure is repeated for zone 2. In zone 3 the attacker places first and is then able to reinforce any of this units in any zone. This is the most crucial phase for the attacker, as it will determine attack odds. Combat is unit-to-unit and the die roll may be affected by unit type, zone of the combat or two-sided attack. The CRT uses a symbolic results table which adds a nice flair. After all of the defender's interceptors are destroyed the attacking player may attack the planet's bases in hope of destroying them and building his own. There is a separate chart for base attacks. Once you gain control of a planet, you may begin to erect units for its defense. By spending an entire turn, command ships can build (or dismantle) one base or one space station. By landing on planets with a friendly base, command ships can also replace one previously destroyed unit.

Though I like the combat system basically, it does not seem to work. It is too difficult to succeed as the attacker. Space stations are excellent in the defense, and most of the special rules favor the defender. Also, the CRT tends to help the defender either with results detrimental to the attacking forces or with stalemates, which can be construed as victories for the defense. Another serious flaw is the counter mix. There are twelve space stations/bases and twelve interceptors: a possible 24 units for defense but only 12 for attacking. The number of interceptors an attacker can keep on hand is already limited by his own defense needs, and the few interceptors available makes more than one offensive attack practically impossible.

There is also a 3-player variant to the game, though I do not think it would be much more interesting. The alliance rules allow one member to move the units of the other for one turn, and on the next turn the other member moves the units. I doubt one gamer will appreciate another player using his units.

WAR OF THE WORLDS II was a good try. There was obviously a strong effort to get that sci-fi "feel" into the game, which I feel the designer accomplished. It is unfortunate that he had to deal with a weak game.

WAR OF THE WORLDS II is published by Rand Game Associates, Box 1776 Liberty Corners NJ 07938.

STELLAR CONQUEST: THE COLONIZATION GAMBIT

by Kelly Moorman

I'm not trying to shock anyone, but in the interests of fair play, I think I should point out that in a basic game of Stellar Conquest, Player #3 has a distinct advantage over the other players regarding the amount of intelligence he can accumulate and utilize in making the decision about where to place his first colony-- which is one of the most vital decisions in the game for any player, no matter what his position.

Player #3 can send out SCTs to explore all of the systems available to him, get the exploration results by the end of the third turn and make a more complete and intelligent choice of the location for his first colony than any of the other players in the game. Then he can send his CTs to the best possible location and have them land and colonize on the fourth turn in preparation for the first Production Year. His advantage appears, when it is taken into consideration, that he can reach a more central location with his massed CTs, take in all the exploration results and then decide on where to colonize and carry it out before the first Production Year.

By a "more central" location for his CTs, I refer to the fact that Player #3 can send his group of CTs directly to Canis, while sending exploration parties to Indi, Kapetyn, and Ophiuchi. He then has the choice of colonizing any or all of them if he so desires, making optimum use of his knowledge. No other playing position in the game has the opportunity to exploit as much information: #3 can reach one Yellow (class G) system, one Orange (class K) system and two Red (class M) systems, where Player #1 can reach the same number and types of systems, but lacks the ability to reach all of them with his CTs from one central position. Player #2 can reach only one Yellow (class G) system, and two Red (class M)systems. Player #4 is in the worst position of all, being able to reach and effectively "cover" only one Red and one Orange system, but having the choice of gambling and trying for one Yellow system "blind" on the fourth turn, without any previous knowledge of what he will find. Of course, Player #4 can just play it conservatively and head straight for Bootis, but if it doesn't "pan out", he's lost the first Production Year's maximum use.

In attempting to make the best use of his early explorations, it is necessary to achieve 3 MA with IUs during Bonus IU expenditure. It is also advisable to acquire extra SCTs during this phase, because maximum utilization cannot be achieved unless all accessible systems have been explored. Each playing position has its optimum strategy for early exploration and exploitation. Player #3 just has an advantage, but not one that should be taken lightly.

Later on, of course, the play balances out, due to the positioning of systems. But these first turns preceeding the first Production Year are by far the most vital in establishing a sound industrial base, and the procedure I have pointed out is, I think anyone would admit, the best in acquiring and exploiting the early exploration results in deciding the best location for establishing that most important first colony.

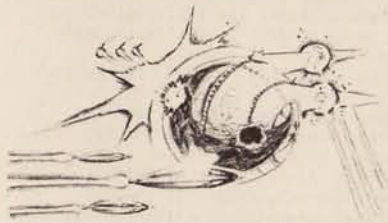
STARGUARD!
or
What to do after you hit the beach

by Larry Bond and Mike Mornard

One aspect of SF gaming that has been neglected until recently is tactical-level suface combat. Robert Heinlien's STARSHIP TROOPERS, Gordon Dickson's DORSAI TRILOGY and David Drake's UNDER THE HAMMERare only a few of the stories that are not only fun to read but propose fascinating new weaponry and tactics.

McEwan Miniatures (380 D Dtreet, Salt Lake City, Utah 84103) has published a set of rules which can be used to game out some of these future conflicts. The game is called STARGUARD! - INTERSTELLAR INFANTRY 2250 A.D. and is a fast-moving, flexible miniature game. I think it provides a realistic picture of what future ground combat might be like.

The rule booklet is divided into three sections, all profusely illustrated. The first section describes the various forces that can be used, along with background history, uniform descriptions, weapons carried and even T.O.E.s for their units. The next section describes the weapons and their abilities. These



include lasers, sonic weapons, projectiles and several esoteric energyptype weapons. The last section describes the rules, mostly conditions for moving and firing, and how to compute the weapon's effect. The rules are a little vague in spots, but they are 'clean' and easy to use.

THE GAME SYSTEM is the essence of simplicity. On any given turn the player can move and then fire or fire and then move. One die is rolled to hit the target, and if a hit is scored, a penetration roll is made. The charts are well planned and easy to read. One point that must be emphasized about this game is the violence of the weapons involved. Devices of incredible frightfulness are lobbed around the board with gay abandon, including free use of micro-nukes and conversion beams. Needless to say, since all this happens on an HO-scale board, the distances have been shrunk by a factor of over 100. A laser rifle has a range of 23 inches maximum and a micro-nuke with a yield of .02 kt has a blast radius of nine inches.

The best feature of the game is the miniature figurines McEwan sells to go along with the game. They are well sculpted and match some of the best SF combat stories around. The Dreenoi figure is an insect-type with a hive mind. The Ralnai is reptilian, and there are many types of human troops, including Dickson-style troops and POWERED ARMOR. The latter is by far the best in game terms and is also an excellent figure. The only thing more powerful on a one-for-one basis than Powered Armor would be a fully self-directing Mark XX Bolo. (You Keith Laumer fans are suitably impressed, I hope.)

Miniature Figurines, Ltd. (Box P, Pine Plains, N.Y. 12567) also has a line of SF figures, but since they are not game-oriented they are grossly under-armed and not as well sculpted. However, there are a few good figures and when doing SF battles in miniature, you take what you can get.

Although THE GAME SYSTEM is simple and the figurines appealing, STARGUARD is not by any means perfect. For example, the limited range means almost shaking hands with the target before firing. Projectile blast radii are not too well defined either, We would propose the following modifications:

1) TRIPLE ALL RANGES, except for the grenade launchers and the Y-Rack. Double these. Leave the ranges of the "ancient" weapons in the back alone. For example, an M.I. plasma gun (not to be messed with) reads: short 0-5(11), medium 5-10(8), long 10-15(4). The number in parenthesis is the chance of hitting on a twelve-sided die. Expanding the range to 0-15/15-30/30-45 gives a slightly more realistic range; however, it still works out to only 90 scale yards. This modification assumes you have the room to do this, at least a four-foot by eight-foot area.
2) TO REDUCE the level of mayhem involved, reduce the numbers of troops and equipment. Remembering that an M.I. platoon can raze a fair-sized city, and what each costs, limit their numbers. Also limit the use of tactical nuke weapons to a few per side. Remember the effect they have on local topography. If you are running a STARGUARD campaign, the weapons and numbers will of course be dictated by the strategic situation.

One thing about authors, while they are very descriptive about the "big stuff" (Berserkers, Bolos, spacecraft) and individual weapons, they create nothing - between the two extremes. For a realistic and effective force, a full spectrum of weapons is needed - from a laser pistol up to a Dreadnought-type spacecraft. This is where the gamer's imagination comes into play, extrapolating from the existing eaponry to create new weapons based on the given technology.

Other materials available to the gamer include a scale model of the SPACE: 1999 Eagle Spaceship. It is close enough to HO scale to be useful. Also Estes model rocket parts can be used to construct some very imaginative ships. If these are inadequate, simply haul out a piece of Balsa wood and start carving. The spacecraft needed in STARGUARD are of the "landing craft" or "retreival boat" type, with the mother ship out of sight and out of game. Airfix puts out a 1/72 scale hovercraft model that is exotic-looking and easily armed. The general rule is to scrounge, and if you can't find what you want, build it yourself. Prior modeling experience is helpful, but not necessary.

Terrain can be devised from anything imaginable. Rocks and odd-colored lichen are always usable as are cut-and-painted pieces of styrofoam. The environmental architecture will depend on the planet being fought on (or over).

3) ADDITIONAL WEAPONRY should be scrounged or built to fill in the gaps. Some of these include Larry Todd;s "Warbots' (armed 12-foot-high man-amplifiers) and battlecraft (floating spheres with a non-sentient carnivorous brain for fire-control). The source for these is a fiction article in a 1968 issue of Galaxy. Another wild piece might be a "Walker". Described in Keith Laumer's A RELIC OF WAR (dynamite story), it is a turreted, six-legged and self-directed machine. It would be much faster than a treaded vehicle. Then again, McEwan's technology includes antigravity, so there would be still faster sutff around. One of these, a platform-mounted hellbore" is also mentioned in RELIC. It is a self-propelled projective weapon. The hellbore is also mentioned as being part of a Bolo's armament.
4) ANOTHER MODIFICATION that can make the game interesting is to have the attackers drop in a' la Heinlein. By having both sides ignorant of the others opening disposition, each is forced to assume the other can be anywhere. The resulting close proximity of the forces speeds up the game considerably. Along with this goes a 'surprise rule': if the individual has not been detected by sensors or heard about over comm gear, he can surprise the other soldiers. The person being surprised has a 1/6 chance of reacting that turn. Next turn reactions are normal. Mutual surprise is possible and common.
5) MISCELLANEOUS mods:
   a) for a laser pistol, smoke is hard cover.
   b) for a laser rifle, smoke is soft cover.
   c) delete the Y-Rack's nuclear capability. According to the book, only non-coms had nuke weapons.
   d) warhead effects: automatic kill/ check for penetration radius in inches. A sonic grenade does not automatically kill powered armor or troops under force screens or hard cover. Check for penetration as though they were outside the kill radius.

      Sonic Grenade: 1.5/3

HE:	Lt:1.5/4.5	M: 3/6	H:4.5/9
Nuke:	Lt:4.5/9	M: 6/12	H:7.5/15
Tridex:	Lt: 3/6	M:4.5/9	H: 6/12
Smoke:	Lt:3X5X5	M:5X7X7	H:7X9X9*
Flare:	Lt:10	M:15	H:20 **

      *(across windXwind directionx height)
      **(area lit)

   e) Y-Rack capacity is six rounds. Four more are carried on the belt. It takes one turn, doing nothing else, to reload.
   f) any weapon firing at 1/6 of its short range is at point-blank range, +2 to hit and +2 to penetrate.

Vehicles and flyers play sightly different roles in the future shown here. When an infantryman can move 30 inches in one turn, against 15 for a treaded vehicle on flat ground, the tank is in a bad way. A vehicle's role becomes that of long-range antipersonnel and area bombardment, against its present role of reducing stongpoints and shock effect. The M.I. now have that role. The vehicle's reliance on infantry support is increased drastically, because the average infantryman handle conventional armor without much trouble at all.

ANTI-GRAVITY VEHICLES handle much of the really heavy weapons, using their ability to fly and their heavy firepower to give fire support to assaulting troops Their role resembles that of the present-day helicopter gunship. The anti-gravs should have some sort of force-screen, since they won't be able to dodge everything, and in the games I've played they are the first things to come under fire. Also, when using flyers, make sure the other side has something in the way of anti-air, or they unbalance the game. Pure aircraft should be used only if one side or the other is grossly outmatched as they are incredibly powerful.

Spacecraft on the ground present the juiciest target of all, and unless heavily shielded are doomed. A +2 force screen is minimum. Never land a spacecraft in the same area with heavy weapons as the risk of its destruction is almost 100%. Neutralize the area first.

While on the subject of shielding, use smoke lavishly. Lasers are a common weapon, and smoke can dissipate many beams before they reach their target. Flares are another handy weapon, because if triggered on the ground, unvisored troops can be blinded for many turns.

In summary, STARGUARD! provides a nucleus for creating a single battle or an extended campaign. It can be played fully with the existing weaponry, or it can be expanded to include any weapon imaginable.

SPI's "STAR SOLDIER"-A SOLITAIRE GAME?

--Amber ap Llychlyn

SPI's STARFORCE game has been in print for some time, and most of the rabid game collectors have bought and played it. It is different from STELLAR CONQUEST, and, let's face it, fairly good (as evidenced by the incredible amount of money spent on it.) But what about SPI's forthcoming game, STAR SOLDIER? After a study of the rules of STARFORCE, it seems as though there can't be any conflict in the new game.

In the First War of Autonomy, (the Alpha Centauri Campaign) Lauren was "telesthetically sedated" and, while the defenders were sleeping, occuplation troops invested the planet and took control of all military equipment. O.K., that's fine - a short, bloodless war - but tell me, where is the need for SOLDIERS?

Let us look further ahead to the conclusion of the Second Xenophobe Incursion. The Expedition "purified" the Xenophobe systems with, among other methods, "kilometer-by-kilometer sweeps by Human/ LChal-Dah Star Soleiers. . . " Why? If the population was sedated, then who needs SOLDIERS? The answer is fairly simple, once you put yourself into the defender's boots, telesthetically speaking. If you knew that your soldiers were going to fall asleep at their posts (all your soldiers, Gnostechs and the like included), what would you do?. . Myself, I'd install a computer-directed, self-defense installation equipped with missles, lasers, communications disrupters - everything that I could think of that would help to slow or destroy an invading force.

A LITTLE REALISM GOES A LONG WAY

Here is where the attacking player needs his Star Soldiers, and he needs darn good ones, too. Can you imagine assaulting a planet where the defense is completely controlled by a theoretically infallible computer? Hoo-boy, talk about Guts! An assault like that would make Operation Bughouse look like a Sunday drive through the park.

In this event, the attacking player runs into the best possible defense. His troops of specially trained soldiers have only one objective: to find the control center of centers, and make it impossible for them to continue their deadly defensive tactics.

In short, it becomes a solitaire game, with one player driving his soldiers into the teeth of a computer-controlled, probably static, but very good,

defense. He must destroy or inhibit that computer as quickly as possible. After all, he wants a planet, not a glowing ball of radioactive isotopes.

Also, if he takes too long, the defenders may begin to wake up. . .

It should be understood that this article is merely one person's feelings. It is quite possible that SPI will come up with some very different rationalizations. We'll just have to wait and see.

VARIATION ON A THEME: MORE REALISM

by Kelly Moorman

One obvious fault in the rules and play of Stellar Conquest is the fact that all of the players can "see" the other players' units, even though they don't know the types or number of the units. Of course, the entire form of play must be changed, and actually should be, in order to achieve maximum realism in playing SC.

The first item necessary to play in a hidden movement game, is a moderator. I realize that it is inconvenient, sometimes impossible, to find someone willing and capable of lending his or her services for this purpose, but in this article, I am stressing the attempt at realism, and not taking into consideration the inconveniences of the moment.

Naturally, some of the rules are going to have to be altered, and others inserted in their place, but the end product justifies the means. It is best to have as many boards as players, but since that is literally improbable (besides expensive), some form of small, easily handled, or reusable map of the SC board is necessary. Each player would mark his movements on his sheet, the moderator would compare them, and when ships of opposing players came in contact with one another, the moderator would reveal the presences, dispositions, or whatever is called for, to the appropriate players. It is best to play this variant in a large room, or even in different rooms, so that the players have little or no chance to see any of the other players' locations that they should not. The moderator would be collecting and tabulating, as well as moving the units on his main SC board, each turn from each player. Then resolving any combats and such, he would distribute the results of the turn, and all for the execution of the next turn by the players. The players would only have access to that information to which they have "legal" access, and no more. They would have no idea as to the locations of the opposing players until contact had been made.

Actually, there are no changes to the basic SC Rules, other than the fact that the players don't have access to the locations of others unless entitled. There are several additions, however. These additions consist of a sensor ability being assigned to each ship type. I have come up with one workable system for sensors: there are many. Here is the one I suggest as having the greatest possiblity:

The two most basic ship-types in the game, the CT and the SCT will share in their sensor ability. This is, each of these ships, regardless of location, can sense the presence of an enemy vessel or colony at a distance of one hex. It will not know the number and type of vessel or

colony, unless it is in the same hex as the enemy. Of course all ships, no matter what sensor ability they have, will retain the ability to explore a Star System, and SCTs and CTs will continue to incur the Exploration Risk when unescorted. When the presence of an enemy is revealed, his identity is not revealed. A player will know that someone is there, but who, what and how many will not be known.

The next two units that have matching sensor abilities are the ESC and MB. Each one of these units can sense enemy presences at a distance of two (2) hexes. Again, the identity, number and type of the presence cannot be determined without being in the same hex as the enemy.

Another two units paired in their sensor ability are the ATK and AMB. Each of these units can sense enemy presences at a distance of three (3) hexes, and once again, the identity, number and type of enemy unit is not determined, unless they are present in the same hex.

The last pair of units to share sensor ability are the DN and the PFS. Each of these can sense enemy presences at a distance of five (5) hexes and tell the number and type of vessel or colony (but not identity) at a distance of 2 hexes.

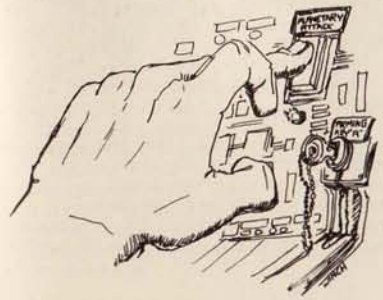
The rationality behind the corresponding ranges of sensors and the recognition of numbers and types of enemy units is this: each hex on the map represents a diameter of one-eighth of a light year. At those distances, detection is difficult, and the larger the ship (and the more expensive), the better the type of sensor system it can carry - the DN being so large and powerful (and expensive) to carry a sensor capable of detecting the numbers and types of enemy units at a two-hex range, or one-fourth of a light year. Of course, even though the number and type of ship is determined, they would have to close the range between them to determine the identity of the ship.

For one thing, this would explain the discrepancies I and others noticed in the artists' conceptions of the various ships that have been published in TSG. That tiny SCT seemed extremely out of proportion to the monstrous DN for costing only one-sixteenth the price.

I know some of you out there think that by limiting the SCT to only one-hex sensor range I have sentenced it to a horrible and useless task. It is true that the sole purpose of the SCT is to explore, and it would seem that it could concievably carry a two-hex sensor since it was designed for this purpose, and I agree. But for playability and balance, I think the one-hex sensor range is sufficient. The SCT still holds that one unconquerable advantage, its unlimited range. Besides, if you try it and it seems to take something from the game, then it can always be changed at your discretion.

The rest of the basic SC rules can all be maintained. The only other addition is on the subject of Nebula Gas Clouds. For these, I think it best for all ships, no matter what sensor they carry, to have the ability to sense presences at a distance of one (1) hex, and DNs to have a sensor range of three (3) hexes in a Gas Cloud. Combinations of Nebula and clear space hexes should be determined and agreed to before the game.

As I stated from the first, this is a variant. Its only purpose is to inject a greater degree of realism into the basic game of Stellar Conquest. It could probably best be referred to as a Tournament Game for SC, since it is my impression of what Metagaming might have done had they injected a Tournament Game into the SC Rules. If anyone is interested in a more complex game of SC, I suggest he contact M. David Johnson. The variant described in this article could be called a very minor adaption of his Advanced SC.



In summary, I would once more like to point out that I have attempted here to provide a playable solution to the realism question that I've heard many times, and indeed, raised myself. There are many more advanced adaptions of this variant. For one, the various sensors of different ships could be graded, and when two ships met, the more powerful sensor would block the weaker one, while still detecting information itself. The grading would be necessary when two large groups met, and the various sensors of each added up and compared to give one victor, or something similar. The possibilities are endless.

VULCAN'S FORGE

ELDON TANNISH: CONCLUSION

(Eldon Tannish is a gifted, young gamer competing in NORCON, a sophisticated future computer-moderated game tournament. "The Game" is a complex series of heuristically self-directed computer program systems resident in a technologically exotic future computer. Each game usually consists of six to twelve gamers competing in a diversity of computer generated scenarious holographically displayed.

Eldon had won the last game and was now to play in the finals with eleven others. But, there had been a change in plans by The Games Foundation, sponsor of the Tournament. The Games Foundation has offered to use it's sophisticated Games Computer to create a scenario based on a current world crisis. This offer has been accepted by the North American government and Soviet States. The tournament final will consist of the crisis scenario.)

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Morning's slow breeze softly rustled the curtains around the open sliding glass door. He sat erect on the tiny hotel balcony, legs crossed, eyes closed. Lips barely whispered an oft practiced rythm of words. Eldon's morning exercise was longer, more concentrated than usual. Today of all days would require utmost conscious clarity. Today's game was a dream-goal achieved, the culmination of years of training and effort. Many, most perhaps, would credit blind luck for his place in today's contest. Whether by skill or luck, today was an opportunity he'd make the most of regardless of criticism and disdain.

As Eldon's trance ego-state deepened, mental speech patterns fragmented. The altered consciousness trance was a matter of passing conscious thought control to his right hemisphere functions. Linear, rationalistic functions like speech were dominate left hemisphere functions and tended to desert Eldon in deeper trances. These trance excercises were designed to form and strengthen co-

herent right hemisphere ego-state patterns. The result of such training in intensive doses was a greatly increased waking access to intuitive brain abilities. A gamer without intuition was forever doomed to mediocrity.

The trance's deeper stages lasted no more than ten or fifteen minutes. As he began coming out, memories of the aftermath of his last, incredible game, flooded in.

The Undersecretary for Colonial Affairs had put the situation nicely. "Given the fragile state of affairs involving colonial expansion, the President is unwilling to leave any opportunity for a solution untried. The generous proposal of the Games Foundation, while unusual, does offer a format for analyzing the current confrontation."

"Mr. Secretary," a reporter interrupted, "is it true that a Soviet games team is being flown in tomorrow?"

"That is essentially correct," he replied. "A Soviet team of eight gamers with advisors will direct the Soviet resources in the planned scenario."

"How long will this game last?" asked another.

"Three days has been allowed. The scenario will commence with the construction start date of the proposed North American colony at the lunar L-4 site. The scenario created by the Games Computer will allow a live simulation of the new colony's construction and eventual economic impact on the world's balance of power. It will also commit some of the best trained problem solvers in existence to an effort at developing new alternatives to the coming economic confrontation. Western civilization has paid for Soviet-controlled oil and satellite power for decades. We need to know what can happen if that relationship is altered."

"What role did the First Soviet Secretary's master's standing in the Russion games ratings play in these developments?" came another question.

The Undersecretary's bureaucratic exterior flickered it's first smile. "I'm sure that played a part. Just as important is the desire of all parties to avoid another conflict. The idea is not too unusual considering the increasingly important economic role of master gamers as consultants."

"How do the Soviet Trojan Colonies feel about this development?" asked a particularly aggressive lady reporter of Ambassador Mikhail Solokov who was standing beside the Undersecretary.

"The Soviet Peoples Republic of Luna and L-5 space always favor peaceful ventures" responded Mikhail. "We do not recognize, of course, any North American right to establish manufacturing colonies at any Lunar orbit Trojan position. The world blessing of Soviet peace cannot be threatened. The Games Foundation's proposal is not necessarily a threat to peace. It may provide alternative suggestions acceptable to the cosmonaut spirit I represent."

"Will the Soviet team seek cooperation in their play?" another asked Solokov.

"The Soviet team is instructed to maintain the peace," he replied. "So many times has the world depended on the peaceful ability of the Soviet Republics it could be no other way."

"Yes, but will your team go to war?" came an insistent voice from the ranked reporters.

"The Soviets will protect the peace as we have since the Arab freedom War," Ambassador Solokov said. "It may be possible that world peace is not so obviously threatened by the North American colony as we presently believe."

The news conference had gone on just as inconclusively as most. Eldon's briefing had added little more data. The twelve finalists in The Games tournament were allotted roles as leaders of various segments of the non-Soviet world. Each played would be scored on how well he fostered and protected the interests of his allotted segment. Scoring would also go for compromise alternatives. The Soviet team would not be scored per se. Their role, for which they were well prepared, was to maintain and protect Soviet world dominance. Eldon's role in the game was that of colony director for the North American L-4 Lunar orbit colony. His job was to find a way to keep the colony's economic wealth from threatening the Soviet's, yet protect the colony's future. Given the fact that the proposed colony could eventually build power satellites to provide 20% of North America's power - half the amount now supplied by the Soviets - Eldon's task seemed impossible. The Soviets had the power to prevent the colony from developing if they saw the slightest threat.

As Eldon's reverie faded he rose to dress for the day and breakfast. The Games Computer had allotted him perhaps the most difficult role. He'd discussed his role with Alba and some ot the other, younger gamers last night. Some interesting suggestions had been made. Despite that, he had no planned strategy. One idea, a hunch really, stayed in his mind. But it was so radical, Eldon had no more than toyed with it. He'd have to go into the game ready to read to the others rather than having the initiative. The next three days seemed unappetizing to say the least.

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Construction schedules for the L-4 colony project showed on the video display. Hard copy detailed printouts littered Eldon's table and the floor. Eight years from first materials launch to completion, if there were no major snags. Nine and a half to ten years was the more likely estimate, given that something would always go wrong. The proposal called for an "accelerator" ramp on Luna that could hurl packets of material to the L-4 point. A "cather net" at the L-4 point would snag the Lunar material. The material would then be incorporated into the cylindrical colony hull. The plan called for direct launches of technicians and equipment from Earth and heavy utilization of the North American orbital satellite as a staging area. The Soviets had used essentially the same plan to build their initial colony at L-5, at tremendous cost in fifteen years. The basic idea dated from the early seventies.

Eldon least liked the time factor, not to mention the tremendous 3 per cent of North American GNP for ten year's cost. As he'd dais in the meeting of game finalists last night, "I'm acting as Director for the colony construction project and colony administrator when it's finished. You may see the colony as North America's chance for economic parity. My role is to represent the construction and colony interest."

"But that's our interest, isn't it?" another finalist said.

"The two are very close, but not necessarily the same as I see it," Eldon replied.

He saw no real way out of the dilemma without a war. The Soviets simply wouldn't tolerate a threat to their world energy dominance, nor a threat to the energy satellites or the parent colony. The Soviets would see the North American L-4 colony as exactly what it was, a move to end the Soviet monopoly on space-beamed power. That would mean war if the L-4 colony was used to build power satellites.

A glance at the games cubicle clock showed five minutes until the first set of decisions were due. For ten hours a day for three days between fifteen and thirty years would be simulated, depending on game events. Eldon knew where the game would go if he followed the directives given him to proceed with colony construction as planned. The Soviets would move when the colony was near completion to destroy it, one way or another.

Eldon made his decision and quickly called up certain astronomical and technological data. Heis chosen course might destroy the simulation and lose him the game. But, he knew what he would do if actually given the authority and resources provided in this real-life simulation. The preliminary data satisfied him. He actually had two chances. Why not try both, since both were certainly cheaper than the plan he'd been given? The latter was essentially the same as the one currently being debated in politics.

Eldon's plan was certainly different. He ordered several vehicles readied for launch at New Cape Canaveral. Their cargo manifests were greatly altered. He entered his decisions as rapidly as he could to beat the time limit.

It had been a good tournament for him, excellent beyond expectation. This turn of events at the end was the sort of unexpected occurence for which the Games Foundation was becoming noted. It gave Eldon a rare opportunity. He'd already come much farther than believable on a mixture of brilliance, luck, and hunch. Now was no time to ignore hunches. Playing out his current hunch might blow this special game wide open.

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The colony project wasn't two years old. At L-4 there was now a 36-kilometer wide chunk of rock, some assorted debris, several large solar energy converter arrays and a floating cylinder four kilometers in diameter. The cylinder was actually a hardened plactic film that had been inflated. A thirty-meter width of material processed through a solar furnace arrangement into a super hard, but light, material would be adhered gratually to the outer surface. Much to the rage of the Soviets, and the unease of his western "allies", Eldon was building a colony. But, unlike the brute Soviet effort, there was no expensive "accelerator" base on Luna, no dangerous "net" arrangement to catch material hurled from the moon, and no army of construction engineers in an expensive construction shack satellite at L-4. Eldon's sense of parsimony and impending doom had short-circuited the whole, expensive, laborious process.

"But, you can't promise not to build the accelerator," the red-faced West team leader had spit out. "Getting the Soviets to agree to let us build the colony without an accelerator or power-beam-to-earth satellites just aborts everything."

"We can't have war," Eldon had answered matter-of-factly. "If North America builds power satellites it destroys the Soviet domination. By promising not to build power satellites for Earth power beaming we avoid war. Promising not to build the accelerator is a solid sign of our intention."

"But the colony material will have to come from Earth. "We'll have to buy it from the Soviet lunar accelerator," protested the team leader, a powerful International Games master.

"Buying material from the Soviets is one way to get a colony and give them an economic profit," stated Eldon.

The argument had gotten rancorous as the conference had continued. Only the need to get turn in decisions and Eldon's

final say over use of resources allocated to the colony project had cut things short. Eldon's budget was slashed by the group representing the North American interest. The Soviets were gleeful. Eldon monitored the reports generated by the Games Computer closely.

The chunk of rock at L-4 was Eros, an an asteroid that occasionally passed as close as 23 million miles to Earth. Initial work teams sent up by Eldon had gone to Eros to stop its spin, dig a tunnel, and set off a series of mini-nuclear laser devices. The small chain of nuclear blasts, as radiation clean as they came, nudged Eros into position at L-4 in eighteen months. Fortunately, Eros was in near optimal position for capture or Eldon couldn't have done it. Eros was a 36 by 15 by 13-kilometer asteroid heavy with iron silicates. The 2,000+ cubic kilometers of material was more than could be sent from the moon in centuries. Moving one large rock was a lot easier than throwing a lot of tiny parcels from the moon and catching them. Eldon had done what God had not, given earth a second moon and a wealth of convenient building material.

The four-kilometer diameter floating cylinder looked similar to the three Soviet colonies, only it was much larger. The eight-kilometer length would give it 100 km of interior surface area when finished. A large segmented tube filled with florescing gas would run down the central azis serving as the colony "sun". Power satellites would beam energy at one end of the tube to regulate light levels from blackout to Earth surface summer high. Fail safes would prevent overloads.

The finished colony would support about 200,000 inhabitants in comfort. A one-third gravity spin would be instituted with an interior air pressure two-third earth sea level pressure but with 30% oxygen. Eldon's main problem was air. The colony needed forty eight cubic kilometers of the stuff. Silicates from Eros were supplying some oxygen, but it was still a headache. It also needed trees, plants, supplies, animals, insects, machinery, etc., etc. Having built a colony for forty times the number of original colonists, Eldon knew getting everything to the L-4 site was going to cost plenty.

Eldon's North American "allies" were happy with the outcome so far. They did not want a colony as huge as Eldon was building, but they were openly pleased at tweaking the Soviets. Their pleasure was short-lived when he admitted Soviet observer teams to the construction site.

"They have to be satisfied I'm keeping my word," Eldon explained. "So far I have kept my promise. No lunar accelerator was built. They have to be absolutely sure no power satellites for Earth are built, or they go to war. I won't start a war."

"Why should we continue to budget you at any level?' they asked him.

"The Games Computer is simulating North American public approval of the colony. Of course, the simulated public also believes I'm lying in my teeth and still plan some sneaky way to give them cheap power," Eldon said. "The Soviets believe I'm lying too. The observer teams are crucial. Another factor is the estimate that the colony could support a million people, if necessary. Many of the intelligentsia and technical class people are toying with the dream of a low-gravity, energy-rich future for their families."

In the end Eldon's budget survived. It amounted to only half the original plan, not enough to fully stock the colony, but plenty for Eldon's purposes.

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The tenth year of the game simulation saw Vulcan, Eldon's name for the colony, take the first slow spin toward one-third gravity revolution. The lights also came on for the first time, showing the raw rock interior in its bleak reality. Another long project of Eldon's had sent a team to Saturn's rings for water. They'd returned, many dead, bringing chunks of methane-dirty ice totaling a tenth-cube kilometer.

Growing thins took first priority. Algae, bacteria, and small flora of all types arrived in dried or seed bulk to be hurriedly planted. The first batch of colonials, skilled industrial types, arrived with a sprinkling of children and a one man to one woman ratio. Raw structures had been built on the interior surface for some shelter. Extra asteroid material left in loose piles would supply other material as needed.

Other prime cargo included industrial and technical machinery of all types. Much work remained. Eldon intended the colony to survive even if it suffered a technological Dark Age. But, the initial colonists would be the nucleus for a highly technical, energy-rich culture.

The possibility of war was what bothered Eldon the most. The Soviet team still hadn't committed itself one way or the other. Though the colony had shown no inclination to build power satellites, the Soviets just couldn't trust its huge economic potential, even if Earth never got direct power. Eldon had ruined the "normal" flow of the game, and other participants suffered severe mental constipation as a result.

"You have to start building satellites NOW. The Soviets are bluffing. They know their star is on the wane," concluded the majority opinion of the other twelve finalists.

"I'd be happy to consider plans in private," Eldon said, "and know the magnitude of new resources that can be spared."

He was simultaneously reconfirming his promise not to build the satellites to the Soviets and giving their inspection teams full run of the colony. There would be a crucial 3-month period when equipment arrived that could be used to build power satellites. Soviet attention on those shipments would divert attention from crucial modifications to Vulcan's surface. If the gamble were lost it would be in the next few game turns. Eldon had hidden his secret under the noses of the others' expectations.

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As was threatened Earth, Luna, and the colonies, Vulcan was ready. Low tremors and shakes disturbed the night of the work-exhausted colonists. Small, steady propulsive forces on Vulcan's surface gradually began easing it out of the L-4 orbit lunar orbit path. Vulcan was on the move away from Earth.

"Vulcan's going out of orbit! What in hell's going on, Eldon?" Eldon's video communicator blasted out.

"Just checking out some emergency safety features," Eldon lied sincerely. "There may be need to adjust orbit occasionally, expecially given the Soviet threat, if you get my meaning."

That had held them for awhile-until Vulcan was 600,000 km away from Earth. Then Eldon lied blandly about "malfunctions," but, they were beginning to doubt. When Vulcan was 1.5 million km out he directed a new series of nuclear blasts aboard Eros that forced it out of orbit several times more rapidly than Vulcan. For Eldon the game was over, even though three hours of the last day remained. He knew he'd "lost" the tournament final. The Games Computer would have no other way of scoring him. Not that he gave a damn. There'd be other tournaments and other opportunities. He'd always have a bit of a weird reputation from this game, but he'd endure. It was all worth the image of freedom Vulcan made in his mind. He could just visualize his final instructions and programming to the Games Computer being executed.

Vulcan would drop slowly toward the sun in a long elliptical orbit. It would pass the sun at .25 A. U. (Astronomical Units) and loop back out near Mars' orbit in a two-year cycle. Eros would follow it to orbit the sun as a permanent resource at .25 A. U. While nearest to the sun the Vulcan colony would be busiest doing maximum metals fabrication and production whild solar radiation energy was sixteen times more intense than at Earth's orbit. On the swing out to Mars' orbit final products and components would be built for sale to Earth. On the outward swing asteroid exploration would occur, and seminal colony bases would be established and supplied. More asteroids of valuable composition would be nudged to move inside Mercury's orbit. Eros would become a permanent industrial base, the bulk of its rock shielding the worst solar radiation. Mercury might possibly be colonized.

Eldon's vision was of a high-energy, space-borne culture utilizing asteroid resources and solar power to achieve independence. To his way of thinking, building colonies to beam power to a resource-poor Earth was a waste. Once in space why go back, except for trade? Man's evolutionary future was space, not a space-supported Earth.

THE END

Non-Technical Note: Most of you have probably seen mention of a lunar Trojan point colony scheme getting some play in current popular periodicals. That scheme is based on roughly current technology and is horribly expensive. It includes the lunar "accelerator", a space station built in Earth orbit and moved brom the moon and the final building of micro-wave generating solar-powered satellites to beam energy back to Earth.

Questions that came to my mind regarding the scheme were as follows:

1. Why use moon rocks when sizeable asteroids may be available near Earth's orbit? They may not be timed as conveniently as Eros was in the story, but still available.
2. Why beam power back to Earth? That only wastes it. Why not use the power in space with no ecological consequences, and ship to Earth finished products?
3. Why not get closer to the sun than to the moon to have even more solar energy available?

Hijacking an asteroid gives you a lot more material with which to work. It also saves you the expense of a lunar base to build the accelerator and what would have to be a complicated scheme to catch the tossed rocks. Also, consider the cost of slowing the rocks down so they stay at the Trojan point.

No, the asteroid has to be cost effective. You don't really need to build a colony or space station; you just dig out living space, seal it and supply it. In fact, why even consider some of the expensive Earth-orbit satellite schemes currently mentioned in aero-space literature? A one-kilometer chunk of asteroid would do just nicely, thank you. And, wouldn't Eldon's colony be a grand place to live?